

# PRACTICAL COURSE OF ENGLISH

FOR THE STUDENTS  
OF DENTISTRY FACULTY



Poltava 1998

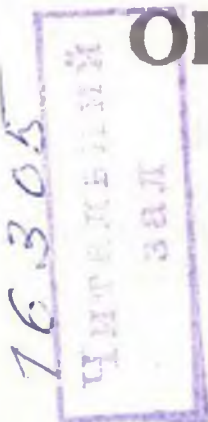


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Ш 57

# PRACTICAL COURSE OF ENGLISH

FOR THE STUDENTS  
OF DENTISTRY FACULTY



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+ Укр 932/351

БІБЛІОТЕКА  
УКРАЇНСЬКОЇ МЕДИЧНОЇ  
СТОМАТОЛОГІЧНОЇ АКАДЕМІЇ  
ІДЕНТИФІКАЦІЙНИЙ КОД 02010824  
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**АНГЛІЙСЬКА МОВА  
(ПРАКТИЧНИЙ КУРС ДЛЯ СТУДЕНТІВ  
СТОМАТОЛОГІЧНОГО ФАКУЛЬТЕТУ): Підручник/**

**Р. В. Шиленко, В. В. Мухіна, Т. П. Скрипникова. — К.: Центральний методичний кабінет по вищій медичній освіті, 1998 р. 560 с.**

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Підручник є оригінальним виданням, яке стане дієвою підмогою у поглибленому вивченні англійської мови для студентів, магістрів та аспірантів стоматологічних факультетів, бажаючих оволодіти англійською мовою необхідною для сучасного лікаря-стоматолога. Підручник розрахований на практичні заняття та самостійну роботу з програмними та оригінальними текстами, загальним та термінологічним словниками, вправами та додатковим матеріалом.

The textbook is the original publication designed for more precise study of the English language by the students, magisters, postgraduates of dental faculties who are eager to master English necessary for the highly qualified modern dentists. The textbook assumes practical classes and independent work at programme and original topics on the speciality, general and terminological dictionaries, exercises and supplementary material.

**ПІДРУЧНИК**

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**Центральний методичний кабінет по вищій медичній освіті, 1998 р.**



***Dear friends,***

Are you considering a career in a health profession? Do you want the chance to run a business? Do you especially want a job where you can help people?

If your answer to these questions is "yes", you may want to consider a future in dentistry, and an excellent place to study dentistry — as you'll hear from students — is the Ukrainian Medical Dental Academy.

We hope you will visit the Ukrainian Medical Dental Academy. By talking with faculty and students, you'll find out what it's like to be a dentist, what other students think of the Academy, and, most important, whether dentistry is the right career for you.



**THE UKRAINIAN MEDICAL DENTAL ACADEMY**



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## ПЕРЕДМОВА

Знання англійської мови завжди було ознакою високої культури, освіченості. Нею розмовляють понад 400 млн. чоловік. Це офіційна мова Об'єднаного Королівства Великобританії та Північної Ірландії, США, Австралії, Нової Зеландії, Канади, Республіки Індія, багатьох держав Африки та ін.

Посібник побудовано відповідно до вимог програми. Він складається з фонетичного корективно-повторювального та основного розділів, довідника з граматики та словника.

Фонетичний корективно-повторювальний розділ містить основні правила читання букв, слів, відомості про ритміко-інтонаційні характеристики англійського речення, основний граматичний матеріал. Для закріплення навичок вимови та граматики пропонується система навчальних і контрольних вправ.

В основному розділі подаються розмовні теми, які відповідають навчальній програмі для студентів стоматологічних факультетів медичних вузів. Тексти супроводжуються системою тренувальних вправ на вироблення та закріплення навичок мовлення, наводяться діалоги. Крім того, вміщено матеріали для запам'ятовування.

У граматичному довіднику наведено основні відомості про граматичний матеріал у вигляді таблиць, який треба опанувати студентам.

Орієнтовна тематика: першої частини підручника (I та II семестри) «Медична освіта в нашій країні та за кордоном»; «Наш інститут» (вступна бесіда); «Біографія»; «Сім'я»; «Місто, в якому я живу (навчаюся)»; «Навчання у медичному вузі»; «Студент та його оточення (розпорядок дня, навчальні предмети, робота в гуртках, секціях, улюблені справи, розваги, спорт, дозвілля, канікули)»; «Медична освіта за кордоном» та інші.

Вимоги щодо практичного володіння видами мовленнєвої



діяльності.

**Аудіювання.** Студенти повинні сприймати на слух при безпосередньому спілкуванні чи в звукозапису тексти, побудовані на засвоєному мовленнєвому матеріалі. Тексти можуть містити до 5% невідомих слів, значення яких можна легко визначити з контексту. Обсяг фраз — до 10-12 слів. Тривалість звучання — 3-5 хв. при темпі мовлення близько до нормального.

**Мовлення.** Студенти повинні вміти вести бесіду і робити усні повідомлення на 3-5хв. звучання в межах пройдених тем, передати зміст тексту загальномедичного характеру (не менше 10 фраз), а також висловити своє ставлення щодо подій, фактів тощо. Під час висловлювань можна користуватися текстом, планом, виписками.

**Читання.** На даному етапі рекомендується проводити два види читання навчальне та ознайомлювальне. Після загально-освітніх текстів поступово вводяться тексти з нормальної анатомії, нормальної фізіології тощо. Вони можуть містити до 7% невідомих слів. Швидкість навчального читання 1700-2000 друкованих знаків на 1 академічну годину. Ознайомлювальне читання проводиться на матеріалі, у якому до 9% незнайомих слів, значення яких легко визначається з контексту. Швидкість ознайомлювального читання вголос — до 600 друкованих знаків за хвилину. Якщо взяти до уваги, що 1 сторінка підручника в середньому становить 2000 друкованих знаків, то варто зазначити, що результати будуть досягнуті в тому випадку, коли студент читатиме й перекладатиме не менше 5 сторінок (до 10 тисяч друкованих знаків на кожне заняття). Позааудиторне читання проводиться з розрахунку від 4500 до 16000 друкованих знаків залежно від підготовки студента.

**Письмо** розглядається як спосіб навчання, який реалізується



у вправах, передбачених програмою, а також в умінні робити письмове повідомлення.

**Переклад.** Студент повинен дати адекватний переклад тексту суспільно-поітичного, науково-популярного і загальномедичного характеру, прочитаного зі словником; передати зміст тексту, прочитаного без словника (розуміння 70-75% інформації).

**Позааудиторне читання проводиться протягом усього періоду в такому обсязі:**

I та II семестр — 4500-16000 друкованих знаків;

### **Мовний матеріал.**

**Фонетика.** Студент повинен володіти на рівні автоматизму вимовою всіх звуків такою мірою, щоб тому, хто його слухає, було все зрозуміло. Особливості англійської вимови: відсутність пом'якшення приголосних; наявність довгих і коротких голосних; наявність складних голосних (дифтонгів); суцільна вимова службових слів з повнозначними. Фразовий наголос. Поділ речення на смислові групи. Інтонація.

**Лексика.** 1500 лексичних одиниць (включаючи шкільну лексику — 1000 лексичних одиниць), з них 800-1000 слів продуктивно.

**Словотворення.** Систематизація матеріалу про способи словотворення. Передбачається розвиток уміння самостійно розкривати значення незнайомих дериватів та складних слів з опорою на такі словотворчі елементи:

n + less = adj (painless); n + ful = adj (painful);  
n + ate = v (to graduate); n + n = (drugstore);  
n + ize = v (to characterize); n + y = adj (watery);  
ger + n = n (measuring-glass); over + n = n (overheat);  
under + n = n (underweight); en + n = v (to encircle);



adj + ness = n (blindness); adj + ly = adv (firmly);  
un + adj = adj (unimportant); in + adj = adj (incorrect);  
adj + en = v (to harden); adj + ify = v (to simplify);  
en + adj = v (to enlarge); adj + ity = n (acidity);  
adj + ish = adj (bluish); v + er = n (worker);  
v + ing = n (warning); un + v = v (to uncover);  
dis + v = v (to disappear); v + ment = n (treatment);  
v + ion = n (prevention); v + able = adj (eatable);  
re + v = v (to reproduce); v + age = n (drainage);  
v + ent = adj (different)

**Граматика.** Систематизація матеріалу, пройденого в школі, з акцентом на труднощі перекладу. Характеристика всіх частин мови. Інфінітив, його форми, чотири форми дієслова, службові та модальні дієслова. Відмінювання дієслів у дійсному, наказовому, умовному способах. Структура простого речення, типи питань. Неособові форми дієслова та їх конструкції. До кінця курсу більш детально повторити і систематизувати часові форми дієслів дійсного способу, активний та пасивний стан, інфінітивні конструкції.

Щоб досягти успіху у вивченні іноземної мови, необхідно тренувати свою пам'ять на засвоєння нових слів. Мовою бажано займатися щоденно не менше 45-60 хвилин. Послідовна робота над матеріалом кожного розділу — запорука успіху. Звертайтеся до граматичного довідника, якщо незрозумілий той чи інший матеріал.

Особливу увагу належить приділяти правилам, вправам на вживання тих розділів граматики, лексики, які відсутні в рідній мові (артиклі, відмінні часові форми дієслова, неособові форми дієслова тощо).

Доцільно завчати напам'ять окремі частини текстів, діалоги.

Радимо постійно слухати радіо, записи, телепрограми англійською мовою, записувати себе на магнітофон.

Якщо трапляються нові слова та вирази, занотуйте їх на

картках. Доцільно на такі картки заносити 5-9 слів чи виразів. Звертайтеся до цих карток якомога частіше, доки не запам'ятаєте їх зміст.

## ФОНЕТИЧНИЙ КОРЕКТИВНО-ПОВТОРЮВАЛЬНИЙ РОЗДІЛ

Англійська абетка (the Alphabet, the ABC) має 26 літер.

Друкована літера	Вимова	Друкована літера	Вимова
A a	[ei]	N n	[en]
B b	[bi:]	O o	[ou]
C c	[si:]	P p	[pi:]
D d	[di:]	Q q	[kju:]
E e	[i:]	R r	[a:]
F f	[ef]	S s	[es]
G g	[dʒi:]	T t	[ti:]
H h	[eitʃ]	U u	[ju:]
I i	[ai]	V v	[vi:]
J j	[dʒei]	W w	[dublju:]
K k	[key]	X x	[eks]
L l	[el]	Y y	[wai]
M m	[em]	Z z	[zed]

Знання абетки допоможе краще оволодіти навичками читання, полегшить пошук слів у словнику.

З 26 літер 20 позначають приголосні, 5 — голосні, а літера у [wai] може передавати і голосний, і приголосний звуки:

*приголосні:* Bb, Cc, Dd, Ff, Gg, Hh, Jj, Kk, Ll, Mm, Nn, Pp, Qq, Rr, Ss, Tt, Vv, Ww, Xx, Zz

*голосні:* Aa, Ee, Ii, Oo, Uu, Yy.

### ПРИГОЛОСНІ

В англійській мові 24 приголосні звуки (consonants), вимова яких, за деяким винятком, подібна до українських.

1. [b] — [б] — boy, be, but
2. [g] — [г] (у словах ганок, ґрунт): go, get, give
3. [t] — [ч] (у слові чай): chess, chalk, teach
4. [d] — [дж] (у слові джміль): age, job, joy, just



5. [f] — [ф] — fall, fine, fish
6. [v] — [в] — voice, vase, very
7. [m] — [м] — man, meet (цей звук звучніший і довший, ніж український)
8. [y] — [і] (у слові рай): you, yes
9. [ʃ] — [ш] (у слові шість): she, short, show
10. [ʒ] — [ж] (у слові жюрі): usual, version, pleasure
11. [s] — [с] — see, bus, so (при вимові цих звуків кінчик язика більш відсунутий назад, ніж при вимові відповідних українських звуків)
12. [z] — [з] — zoo, iz, eggs
13. [k] — [к] (вимовляється з придихом): key, car, keep
14. [p] — [п] (вимовляється з придихом): up, pen, cup, put
15. [t] — [т] (вимовляється з придихом, кінчик язика торкається альвеол): top, tea, toy
16. [d] — [д] (вимовляється з придихом): dog, do, bed, food
17. [n] — [н] - in, name, know, new, now
18. [l] — [л] - look, let, ill, old
19. [r] — [р] - rain, red, write, read (при вимові звука кінчик язика піднятий, торкається піднебіння, повернений до заднього схилу альвеол; передня частина язика увігнута).
20. [h] — [х] (утворюється легким подихом повітря, як у слові хан): hat, who, hand
21. [θ] — глухий звук thank, both
22. [ð] — дзвінкий звук that, then
23. [ŋ] — (носовий звук; утворюється шляхом зімкнення задньої спинки язика та піднебіння): going, young, ring
24. [w] — (губний звук; утворюється шляхом округлення губ, як при вимові [y], що переходить у [v]): was, we, why

### **Приголосні поділяються на дзвінкі та глухі:**

дзвінкі:            b, d, g, m, n, v, z, d , r, j, w, l,  
 глухі:             p, t, k, f, s , h, t

## ГОЛОСНІ

Кожний голосний відповідає певній букві, проте одна буква може позначати кілька звуків залежно від її позиції у слові.

1. /i:/ — фонема, схожа на протяжний [i] в словах нікель, ніколи: see, me, be
2. /i/ — фонема, схожа на короткий український звук [и] в слові битва: sit, did, it
3. /e/ — фонема, схожа на короткий звук [е] в слові теніс: ten, red, bed, pen
4. /æ/ — фонема, схожа на звук [е], який вимовляється широко розкритим ротом: hat, man, cat
5. /ʌ/ — фонема, схожа на ненаголошений звук [а] в слові дарунок: cup, but, must
6. /ɑ:/ — довга фонема заднього ряду, схожа на звук [а] в словах так, лад: arm, class, car
7. /ɒ/ — коротка фонема (під час вимови губи округлюються), схожа на звук [о] в словах док, рок: shop, not
8. /ɔ:/ — довга фонема заднього ряду, схожа на звук [о] в словах порт, сорт: saw, floor, all, door
9. /u/ — коротка фонема, схожа на ненаголошений звук [у] в слові рука: good, put
10. /u:/ — звук [у] в словах суд, куля: too, food, soon
11. /ə/ — коротка фонема, яка нагадує щось середнє між коротким звуком [е] і дуже коротким [а]: supper, remember
12. /ə:/ — довга фонема, вимовляється як довгий звук [ ] під наголосом; для вимови слід злегка розтягнути губи, майже зімкнути зуби і протяжно вимовити український звук [у], а потім, не змінюючи позиції органів мовлення, звук [е]: bird, work, first
13. /ei/ — дифтонг, подібний до українського [ei] у словах клей, рейд: take, name, make
14. /ou/ — дифтонг, подібний до українського [ou] в слові клоун: home, go, so
15. /ai/ — дифтонг, подібний до українського [ai] у слові край: five, my, life
16. /au/ — дифтонг, подібний до українського [au] в слові раунд: now, how, brown
17. /oi/ — дифтонг, подібний до українського [oi], але після



- вимови /o/ вимовляється коротке [i]: boy, toy
18. /iə/ — дифтонг, подібний до українського [ia] в слові  
клавіатура: near, real, here
19. /εə/ — дифтонг, перший елемент якого дещо схожий на  
український звук [e] в слові ера, а другий елемент —  
нейтральний голосний [ ] з відтінком [ ]: air, hair,  
care, were, where
20. /uə/ — дифтонг, подібний до українського [ye] в слові  
Уельс: poor, sure

### «НІМІ» ЛІТЕРИ

«Німі» літери («mute» letters) не вимовляються (не читаються), але залишаються в словах за традиційним правописом.

b	у сполученні -bt	debt [det], doubt [daut]
b	у сполученні -mb	comb [koum], climb [klaɪm]
e	в кінці слова, коли вона не єдина голосна	late [leɪt]
g	у сполученні -gn	foreign [forɪn], sign [saɪn] але significance
gh	у сполученнях -igh, -tigh, -ough, -augh	sign [saɪ], eight [eɪt]
h	у сполученні -wh, якщо наступна літера -e	when [wen] where [wɛə]
k	у сполученні -kn на по- чатку слова	know [nou], knife [naɪf]
l	у сполученнях -alf, -alk, -alm, -olk	half [ha:f], talk [to:k], calm [ka:m], folk [fouk]
n	у сполученні -mn	autumn [ɔ:təm]
p	у сполученні -ps	psychology [saɪkoledʒi]
t	у сполученні -stle	whistle [wɪsl]
w	у сполученні -wr, а також у слові answer [aɐ:nsə]	write [raɪt], wrong [rɒŋ]
w	у сполученні -wh, якщо наступна літера -o	whole [houl], who [hu:]
u	у сполученні -gu+голосний	guess [ges]

## НАГОЛОС У СЛОВАХ

В англійських двоскладових словах наголос (stress) як правило падає на перший склад: enter [entə], hostel [hostəl], subject [sʌbdʒikt]; adult [ədʌlt], before [bɪfɔː].

Слова, що складаються з чотирьох і більше складів, мають головний і другорядний наголоси: examination [ɪgzæmɪneɪʃn], introduce [ɪntredʒuːs], unaided [ʌneɪdɪd], stomatological [stɒmtələdʒɪkəl].

## НАГОЛОС У РЕЧЕННІ

Сильніша вимова, тобто виділення у реченні голосом певних слів називається **фразовим** наголосом. В англійському реченні, як правило, наголошені повнозначні слова (змістові дієслова, іменники, прикметники, числівники, прислівники, питальні та вказівні займенники); службові слова, допоміжні та модальні дієслова у стверджувальних реченнях, артиклі, прийменники, сполучники, особові та присвійні займенники, дієслова-зв'язки — ненаголошені:

This is a ↘ room. She ↘ likes to read. What does he ↘ do?

Виділення у реченні одного чи кількох слів, важливих за змістом для того, хто говорить, називається **логічним** наголосом. Логічний наголос може падати на будь-яке слово, як повнозначне, так і службове: Our classes usually last till four o'clock in the afternoon.

## РИТМ ТА ІНТОНАЦІЯ

Для ритму англійської мови характерне чергування наголошених та ненаголошених складів через більш чи менш рівні проміжки часу. Чим більша кількість ненаголошених складів між наголошеними, тим, відповідно, швидший темп мовлення того, хто говорить, тобто тим швидше відбувається «промовляння» ненаголошених складів: I go to the institute in the evening. Я йду до інституту ввечері. Відрізок - institute in the, тобто склади, розташовані біля найближчого наголошеного елемента вимовляти- муться найшвидше.



Інтонація (intonation) - це зниження чи підвищення голосу під час мовлення.

Зі спадною інтонацією вимовляються:

1. Стверджувальні речення:

He has already bought this dictionary.

2. Заперечні речення:

She has never been to London.

3. Спеціальні запитання (починаються з питальних слів - what, -where, -how, -why, -when, -who, -whose тощо):

What is your name? Who speaks English? When does he read newspapers?

4. Друга частина альтернативного запитання:

Are you a schoolboy (schoolgirl) or a student?

З висхідною інтонацією вимовляються:

1. Загальні запитання (які потребують відповіді «так» чи «ні»):

Do you speak French?

2. Слова, які перелічуються, крім останнього:

I have father, mother, a sister and a brother.

3. Речення, у якому висловлюється здивування, з перепитуванням:

Is it true? Are you sure?

4. Уточнення, перепитування:

Pardon!  
Sorry!

### **Вправи на вимову приголосних:**

- [p] pink, spoon, pen, pencil, pin, postcard, pocket, pub
- [b] brown, brother, blue, black, big, bear, Bill, boot, but
- [t] telephone, taught, team, tomato, tennis, tin, top, till
- [d] dance, do, did, dry, day, doze, dark, drink, door, dim
- [k] clock, cake, car, kind, kill, kid, kick, kite, can, come
- [g] garden, good, go, Greek, glad, gold, girl, grey, grave
- [s] ski, Saturday, sleep, sit, sun, cite, centre, city, cent
- [z] zone, does, pens, phase, buz, prize
- [ʃ] shine, shut, share, she, shop, push, ship, cash, shoe
- [ʒ] treasure, measure, casual, vision, pleasure, television
- [tʃ] match, chine, chance, choose, chair, watch, cherry, cheap
- [dʒ] just, July, jeep, joke, major, large, age, bridge, orange
- [f] find, fall, fill, fat, fail, fate, fine, feel, leaf, life
- [h] how, hope, hit, hole, hill, home, hous, heat, hat, hall
- [v] view, vase, visit, vote, even, leave, five, move, over
- [w] well, were, walk, wait, weep, wife, while, wheel, we, west
- [j] yesterday, yet, use, year, you, York, yellow, yes, few
- [θ] thank, think, thick, mouth, both, path, tooth, fifth
- [ð] the, than, there, they, father, brother, another, with
- [m] member, met, make, my, miss, mind, mile, middle, man, main
- [n] name, nine, knee, know, knife, nice, night, now, number
- [ŋ] writing, among, young, sing, song, wrong, ring, wing, thing
- [l] love, lunch, left, late, low, line, light, land, let, lamp
- [r] room, river, write, rich, road, wrong, rain, raise, read

### **Вправи на вимову голосних:**

- [i] film, it, ill, Tim, fifty, miss, sit, ship, hill, in, pin
- [i:] feet, eat, heel, team, fifteen, meet, seat, sheep, least
- [ɪ] tin, pit, Bill, chick, mill, rid, hid, din, bit, nil
- [e] bell, check, red, Ted, felt, end, desk, best, tell
  
- [e] men, beg, bed, bet, said, dead, led, pen, ten, pet, set, peck
- [æ] man, bag, bad, bat, sad, dad, lad, pan, tan, pat, sat, pack
- [ʌ] done, bug, bud, but, cut, suck, dust, lug, pun, tub, putt, such
- [ɑ:] dart, cart, dark, mast, lard, farm, tard, part, calm, park
- [æ] cap, cat, rat, mat, match, clack, had, can



[ɔ] cop, cot, rot, dot, stop, clock, cod  
 [ɔ:] pour, store, cought, port, four, north, cord, dawn, corn  
 [u] push, room, would, put, should, could, good, wood, wool  
 [u:] tool, whom, rude, too, mood, moon, food, do, blue, two  
 [ə:] turn, sir, shirt, dirty, learn, shirt, hurt, world, birth  
 [ei] play, pain, way, tail, say, may, wait, rate, date, plane, name  
 [ai] pie, wide, tide, side, my, why, rye, die, line, fly, time, by  
 [a:] heart, park, bard, dark, hard, mark, star, lark, laugh, far  
 [oi] boy, oil, coin, boil, toy, joy, point, voice, noise, annoy  
 [au] now, how, brow, loud, down, ground, cow, mouse, house, mouth, loud  
 [ou] phone, no, know, boat, note, coat, grown, go, bowl, bone, woke  
 [iə] tear, beard, ear, here, hear, dear, clear, beer, near, mere  
 [ɛə] chair, bear, hair, hare, where, air, mare, fare, dare, stare  
 [iə] easier, atmosphere, idea, mere, sheer, real  
 [ɛə] pair, pear, their, aware, compare, care, Mary, parents, there

### **Grammar Terms** **Граматичні терміни**

the verb	— дієслово
the infinitive	— інфінітив
the prepositional	— прийменниковий
the participle	— дієприкметник
the noun	— іменник
the plural form	— множина
the case	— відмінок
the possessive case	— присвійний відмінок
the article	— артикль
the indefinite article	— неозначений артикль
the definite article	— означений артикль
the adjective	— прикметник

the possessive degree  
the comparative degree  
the superlative degree

— основна форма  
— вищий ступінь  
— найвищий ступінь

the numeral  
cardinal numerals  
ordinal numerals  
fractions

— числівник  
— кількісні числівники  
— порядкові числівники  
— дробові числа

the pronoun  
personal pronouns  
possessive pron.  
reflexive pron.  
reciprocal pron. —  
demonstrative pron.  
interrogative pron.  
conjunctive pron.  
indefinite pron.  
negative pron.  
defining pron.  
quantitative pron.

— займенник  
— особові займенники  
— присвійні займенники  
— зворотні займенники  
— взаємні займенники  
— вказівні займенники  
— питальні займенники  
— сполучні займенники  
— неозначені займенники  
— заперечні займенники  
— означальні займенники  
— кількісні займенники

the adverb  
adverbs of time  
adverbs of place

— прислівник  
— прислівники часу  
— прислівники місця

adverbs of repetition  
and frequency  
adverbs of degree  
adverbs of manner

— прислівники повторю-  
ваності й частотності  
— прислівники ступеня  
— прислівники способу дії

the preposition

— прийменник

the conjunction  
copulative c.  
disjunctive  
adversative

— сполучник  
— єднальні сполучники  
— розділові  
— протиставні

*Ук н 932/351*

БІБЛІОТЕКА  
УКРАЇНСЬКОЇ МЕДИЧНОЇ  
СТОМАТОЛОГІЧНОЇ АКАДЕМІЇ  
ІДЕНТИФІКАЦІЙНИЙ КОД 02010824  
м.Полтава



## The sentences

the sentence	— речення
declarative s.	— розповідні речення
interrogative s.	— питальні речення
imperative s.	— спонукальні речення
exclamatory s.	— окличні речення
compositive s.	— складні речення
simple s.	— прості речення
extended s.	— поширені речення
unextended s.	— непоширені речення
compound s.	— складносурядні речення
complex s.	— складнопідрядні речення

## The principle parts of the sentences

the subject	— підмет
the predicate	— присудок
<b>the secondary parts of the sentence</b>	— другорядні члени речення
the object	— додаток
the attribute	— означення
the adverbial modifiers	— обставини
<b>the types of question</b>	— типи запитань
general questions	— загальні запитання
special questions	— спеціальні запитання
alternative questions	— альтернативні запитання
disjunctive questions	— розділові запитання
imperative	— наказовий
exclamatory	— окличний
compound sentences	— складні речення
complex sentences	
a) principle clauses	— головні речення
b) subordinate clauses	— підрядні речення

1. subject clauses
  2. predicate clauses
  3. object clauses
  4. attributive clauses
  5. adverbial clauses of the time, place, cause, result, manner, condition, concession.
- Indirect speech.

### **Завдання до вправ.**

1. Read and translate text A.
2. Find the predicates in ...
3. Put questions to the text (to the first paragraph, to the sentence).
4. Describe the picture.
5. Form the nouns (verbs, adjectives ...).
6. Name and translate the verbs from which the following nouns are formed.
7. Supply «already, ...» where it is necessary.
8. Put the verbs in the required form.
9. Choose the proper verb (noun, ...), answer (questions).
10. Pay attention to the words in bold type.
11. Revise text B.
12. Combine the nouns with appropriate verbs.
13. State the part of the speech.
14. Put the verbs in brackets into the proper tense.
15. Give the English (Ukrainian) equivalents of the following.
16. Finish the sentences.
17. Make the following sentences negative and interrogative.
18. Use the construction ...
19. Memorise the verbs.
20. Recall the meaning of the ...
21. Turn the direct speech into indirect.
22. Give short answers (extended answers).
23. Explain the pronunciation (the rule).
24. Define the parts of speech.
25. Substitute the words in bold type.
26. Pick out the words (sentences) corresponding to the content of the text.
27. Entitle text A.



## **Граматичний корективно-повторювальний розділ.**

### **Морфологія.**

#### **Іменник.**

Іменник (the noun) в англійській мові, як і в українській, означає назви предметів, живих істот, явищ, понять, і речовин: a man, a table, friendship, water...

Характерні суфікси іменників.

- er (or): reader, speaker, teacher, doctor.
- ment: department, development.
- ness: happiness, tenderness, sleeplessness.
- ion : cooperation, operation, connection.
- dom : freedom, kingdom, wisdom.
- ship: leadership, friendship.

#### **Рід.**

В англійській мові рід є категорією не граматичною, а чисто смисловою: іменники, які означають в залежності від статі, відносяться до чоловічого або жіночого роду: a man, a woman та ін. Іменники, які означають неживі предмети, належать, як правило, до середнього роду: a table, a book та ін. Винятки: засоби водного транспорту головним чином відносяться до жіночого роду (a ship, a boat), а також назви країн, які англійці часто відносять до жіночого роду.

Іменники бувають власні та загальні.

#### **Число.**

1. Іменники поділяються на обчислювані (countable

nouns): a book-books; і необчислювані (uncountable nouns): freedom, love, peace. Обчислювані іменники вживаються в однині (singular) та множині (plural). Необчислювані іменники не мають множини. Множина іменників утворюється шляхом додавання до форми в однині закінчення -s, або -es після ch, x, sh, ss, o):

a photo - photos, a glass - glasses, a watch - watches  
a bush - bushes

2. У деяких іменниках, що в однині закінчуються на -f, -fe, у множині -f змінюється на -v й додається закінчення -s:

a wife - wives  
a wolf - wolves.

Виняток: a chief - chiefs;  
a roof - roofs.

3. Іменники в однині із закінченням -у у множині змінюють -у на -і з закінченням -es:

a story - stories.  
Виняток: a play - plays  
a day - days  
a key - keys.

4. Деякі іменники утворюють множину змінюючи кореневу голосну:

a man - men  
a woman - women  
a tooth - teeth  
a foot - feet, a mouse - mice  
a child - children  
an ox - oxen.

5. Деякі іменники вживаються лише в однині:  
advice, news, information, knowledge та ін.

6. Деякі іменники вживаються лише у множині:  
goods, trousers, scissors, clothes та ін.

7. Збірні іменники мають лише форму однини:  
police, cattle, people.

8. Прізвище у формі множини вживається з означеним артиклем на позначення сім'ї: the Blacks, the Kovalchuks.



## Відмінок.

Іменники в англійській мові мають два відмінки: загальний (the common case) і присвійний або родовий (the possessive case):

daughter - daughter's doll (утворюється додаванням апострофа та букви -'s до форми однини в загальному відмінку).

### Однина.

#### Загальний відмінок

my friend

Mary

the hospital

#### Присвійний відмінок

my friend's

Mary's friend

the hospital's equipment

### Множина.

my friends

the doctors

my friends' books

the doctors' meeting

Функції іменника у реченні:

- підмета: My friends live in Poltava.
- іменної частини складеного присудка: My sister is a doctor.
- додатка: I got a text-book.
- означення: This is a ball pen.
- обставини: John came to Kyiv.

## Артикль ( The Article)

У англійській мові є два артиклі (articles): неозначений а (an) й неозначений the.

### Неозначений артикль.

Неозначений артикль (the indefinite article) «а» утворився від числівника «one» (один), тому вживається тільки перед тими іменниками, які мають форму множини і їх можливо перерахувати:

a book, a man, an apple.

Неозначений артикль передає лише вказівку на належність предмета до якогось класу однорідних предметів. Перед абстрактними іменниками і конкретними іменниками, які не мають форми множини, артикль не вживається. Неозначений

артикль вжи- вається:

1/ з іменником - іменною частиною складного присудка: My sister is a doctor.

2/ з іменником - підметом після зворотів there is (there was, there will be): There is a book on the table.

3/ з додатком після дієслова have: I have a friend.

4/ перед іменниками в однині після слів such, rather, quite: He is such a good doctor.

5/ після слова what в окличних реченнях: What a nice idea!

6/ з деякими словами: a lot, a few, a little, a bit, та ін: She speaks English a bit.

7/ у значенні числівника one перед числівниками hundred, thousand, million.

The Institute has a million books.

### **Означений артикль.**

Означений артикль (the definite article) має форму the. Він походить від вказівного займенника that(this). Цей артикль вживається перед іменниками в однині та в множині.

Означений артикль вживається:

1. Коли перед іменником стоїть:

а) порядковий числівник: The first student came into the classroom.

б) прикметник у вищому ступені: He is the most experienced doctor.

в) один з прикметників: last, next, same, following. Put the same question. (Але: next week, next month, next door, last Sunday, last year).

2. З іменниками, що означають предмети, єдині у своєму роді: the sun, the earth, the moon...

3. У виразах: in the afternoon, in the morning ..., on the left, to the right, the other day ...

4. У виразах типу: the more... the better...

5. Перед прізвищами, коли мається на увазі вся сім'я: the Browns, the Kovalchuks.

6. Перед назвами більшості газет і пароплавів: the Times, The Moscow News.

7. Перед назвами народів: the Ukrainians, the Americans.



8. Перед назвами деяких країн: the USA, the United Kingdom.

9. Перед іменниками в однині, коли останній означає цілий клас предметів: the rose is a flower.

Означений артикль не вживається:

1. Перед званнями, якщо за ними йде прізвище:

Professor Austin, Mister Snow.

2. Перед назвами міст, вулиць, площ:

Kyyiv, London, Oxford street.

3. Перед назвами місяців, днів, пори року:

in April, on Monday, in summer. Але: in the summer of 1996.

4. Перед абстрактними і речовими іменниками, яких не можна перераховувати і які вживаються в загальному значенні:

wisdom, fluid.

5. Перед власними іменами: Johnson, Peter.

6. Перед словами: breakfast, lunch, dinner, supper. We have breakfast at 7 o'clock.

7. У деяких виразах: at night, by train, from morning till evening, to go to bed, by heart, to go to school, at home.

### Прикметник.

Прикметник (the adjective) - частина мови, що виражає ознаку і якість або властивість предметів і відповідає на питання What?

Прикметники бувають прості (big, cold), похідні (important, beautiful) і складні (well-organized).

Основні суфікси прикметників:

- able (ible): changeable
- ont (ent): different
- ary (ory): revolutionary
- en: wooden
- ic: historic
- ish: reddish
- ive: comprehensive
- ful: useful

- less: useless
- ly: friendly
- ous: famous
- y: frosty.

Якісні прикметники мають ступені порівняння і можуть визначатися прислівником (quite, so, very, rather та ін.)

Ступені порівняння прикметників.

Є три способи вищого та найвищого ступенів порівняння (degrees of comparison):

- 1) за допомогою суфіксів -er, -est;
- 2) за допомогою слів more, the most;
- 3) від іншого кореня.

1. Односкладові і двоскладові прикметники. звичайний ступень вищий ступень найвищий ступень

big - bigger - the biggest

long - longer - the longest

wide - wider - the widest

2. Багатоскладові прикметники.

beautiful - more beautiful - the most beautiful

different - more different - the most different

difficult - more difficult - the most difficult

3. Прикметники, що утворюють ступені порівняння від іншого кореня. good - better - the best bad - worse - the worst, few little less the least, many - much - more - the most

## Прислівник

Прислівник (the adverb) — це частина мови, що вказує на ознаку дії або обставини, за яких вона відбувається.

Прислівник відноситься до дієслова і показує, як, коли, де і т.д. відбувається дія.

1. Прості (simple): now, hard, fast, too, always.
2. Похідні (derived): quickly, usually, wearily, happily.
3. Складні (compound): sometimes, somewhere, inside.
4. Складені (composite or phrase adverbs): at first, at last.

За визначенням прислівники поділяють на прислівники місця (here, inside, below та ін.), часу (yesterday, now, often, seldom, at first, at last), міри і ступеня (little, much, very, too, so).



### Ступені порівняння прислівників.

У деяких прислівників ступені порівняння утворюються так, як у прикметників. Односкладові прислівники: утворюють вищий ступінь за допомогою суфікса -er і найвищий - за допомогою суфікса -est.

I Звичайний ступінь	Вищий ступінь	Найвищий ступінь
hard	harder	hardest
late	later	latest

Прислівники, які закінчуються на -ly

II. usually	more usually	most usually
clearly	more clearly	most clearly

Ступені порівняння прислівників often, quickly, slowerly утворюються двома шляхами:

III. often	more often	most often
slowly	more slowly	most slowly
	slower	slowest

IV Деякі прислівники, що утворюють ступені порівняння не за правилами: well-better-best, much-more-most, badly-worse-worst

### Місце прислівника у реченні.

Прислівник способу дії slowly, quickly, badly ставлять безпосередньо після перехідного дієслова:

She went slowly to the park.

Якщо дієслово перехідне, то прислівники ставляться після додатка або перед дієсловом:

I read a letter quickly. I quickly read a letter.

Прислівники always, often, never, usually, sometimes ставляться перед дієсловом:

He sometimes comes to see me. I usually go to bed lately.

Проте ці прислівники ставляться, як правило, після першого допоміжного дієслова:

I am always busy. He is never late. You must always be in time here.

Прислівники today, yesterday, tomorrow стоять або на початку або у кінці речення:

Yesterday I read an interesting book. You will read this book tomorrow.

## Займенник

Займенник /the pronoun/ - це слово, яке не називає предмета, особи, явища, якості та числа, а лише вказує на них.

У англійській мові займенники поділяються на:

- 1) особові;
- 2) присвійні;
- 3) зворотні та підсилювальні;
- 4) вказівні;
- 5) питальні;
- 6) відносні;
- 7) неозначені.

I. Особові, присвійні, зворотні та підсилювальні займенники.

### Особові

Називний відмінок	Об'єктний відмінок	Підлягаюча форма	
I я	me мене	my мій	
we ми	us нас	our наш	
you ти/ви	you тебе	your твій	
you ви	you вас	your ваш	
he він	his його	his його	
she вона	her її	her її	
they вони	them їх	their їх, їхні	
it він	it його	its його	
вона	її	її	
воно	його	його	

I give him my bag.

You give me your book.

We give them our books.

They give him his bag.

She gives me her bag.

He gives us his bag.

### Присвійні

(абсолютна форма)

mine мій, моя, моє, моє

ours наш, наша, наше, наш

yours твій, твоя, твоє

yours ваш, ваша, ваше, ваш



their    їхній, їхня, їхнє  
 his      його  
 hers    її  
 its      його, її  
 This pen is mine.  
 This pen is ours.  
 This pen is yours.  
 This pen is theirs.  
 This pen is his.  
 This pen is hers.

### **Зворотні та підсилювальні займенники.**

myself	себе, сам
ourselves	себе, самі
yourself	себе, сам
themselves	себе, сам, сама, самі
himself	себе, сам    herself себе, сама    i
tslf	себе, сам, сама, само

I did this hometask myself.  
 We did this hometask ourselves.  
 You did this hometask yourself.  
 They did this hometask themselves.  
 He did this hometask himself.  
 She did this hometask herself.  
 It did the work itself.

### **Вказівні займенники**

однина		множина	
this	цей, ця, це	these	ці
that	той, та, те	those	ті

The same	той (та) же самий	the same	ті ж самі
such	такий	such	такі

### **Питальні займенники**

who? (хто?), what? (що?, який?), whose? (чий? чия? чие? чиї?)  
 whom? (кого? кому?), which? (котрий? котра? котре? котрі?)  
 Who came to you?  
 What language do you know?  
 Whose pen is this?

Whom did we see last?

Which book will you buy?

Відносні (з'єднувальні) займенники  
who? (хто), whom (кого), whose (чий), what (що, який), which  
(котрий, який), that (котрий).

I know who wrote this composition.

I know the man who wrote this paper.

I know whom you wrote to.

I know whose cup is this.

I know what you mean.

I know which report you are talking about.

I know that this dress is on sale.

Неозначені займенники

Вони діляться на прості та складні.

Прості: some, each, all, other, another, any, much, many, little, few,  
both, one.

Складні: (утворюються від простих some, any, no, every  
додаванням до них -body, -one, -thing): somebody, anybody,  
nobody, someone, anyone, everyone, everybody, nothing, every-  
thing ...).

У стверджувальних реченнях вживаються:

some — деякий, декілька, деякі

somebody — хто-небудь someone - хтось

something — що-небудь, щось

Give me some books.

Somebody comes.

Something has happened.

У питальних реченнях вживаються

any - який-небудь, декілька

anybody - хтось

anyone - хто-небудь

anything - щось

Have you any books at home?

Did anybody come to you?

Has anything happened?

У заперечних реченнях вживаються

no — ніякий



not...any — ніхто  
nobody — ніхто  
not...anybody — ніхто  
no one — ніхто  
not...anyone — ніхто  
nothing — ніщо  
not...anything — ніщо

I have no telephone at home. I don't know any story. Nobody (no one) came there. I did not see anybody (anyone) there.

Займенник **some** вживається з необчислюваними іменниками і не перекладається:

Give me some milk, please. Дайте мені молока (обмежену, певну кількість).

У англійському реченні може бути лише одне заперечення (один заперечний займенник), наприклад:  
Ніхто ніколи її не бачив. - Nobody has ever seen her. Anyone has not ever seen her. Anyone has never seen her.

### Числівник.

Числівник (the numeral) - частина мови, що виражає кількість або порядок предметів та явищ. Числівники поділяються на кількісні й порядкові. Кількісні числівники (cardinal numerals) означають кількість предметів і відповідають на питання how many? (скільки?) Порядкові числівники (ordinal numerals) означають порядок при лічбі і відповідають на питання which? (котрий?).

Кількісні числівники	Порядкові числівники
1 one	the first
2 two	the second
3 three	the third
4 four	the fourth
5 five	the fifth
6 six	the sixth
7 seven	the seventh
8 eight	the eighth
9 nine	the ninth
10 ten	the tenth

11 eleven	the eleventh
12 twelve	the twelfth
13 thirteen	the thirteenth
14 fourteen	the fourteenth
15 fifteen	the fifteenth
16 sixteen	the sixteenth
17 seventeen	the seventeenth
18 eighteen	the eighteenth
19 nineteen	the nineteenth
20 twenty	the twentieth
21 twenty one	the twenty first
22 twenty two	the twenty second
23 twenty three	the twenty third
30 thirty	the thirtieth
...	...
90 ninety	the ninetieth
...	...
100 one hundred	the hundredth
101 one hundred and one	the one hundred and first
222 two hundred and twenty two	the two hundred and twenty second
1000 one thousand	the thousandth
1432 one thousand four hundred and thirty two	the one thousand four hundred and thirty second

Числівники hundred, thousand, million не приймають закінчення «s» коли перед ними стоять числівники two, three, four ... three hundred, four thousand; five million...

Числівники hundred, thousand вживаються із закінченням -s у множині, коли вони виражають невизначену кількість сотень тисяч, мільйонів. У цьому випадку вони перетворюються в іменники і після них вживається іменник з прийменником -of:

hundreds of letters  
thousands of kilometers  
millions of roses.

Між сотнями, тисячами або мільйонами та десятками і одиницями (два знака від кінця числівника) ставиться сполучник and:

101 - one hundred and one



## Дробові числа

1/2 one second 1/4 one fourth 0.5 nought point five, 0.05  
nought point nought five

## Роки

1997 — nineteen ninety seven

1998 — nineteen ninety eight

2000 — twenty hundred

Mary was born in 1977.

Petrowas born on the 17th of May in 1975.

## Прийменник

Прийменник (the preposition) це службове слово, яке виражає відношення одного члена речення до іншого. Розрізняються прийменники місця (in, on, by, at, under), руху (to, from, into, across), часу (at, on, in, for)

at 2 o'clock

in the morning

on Monday

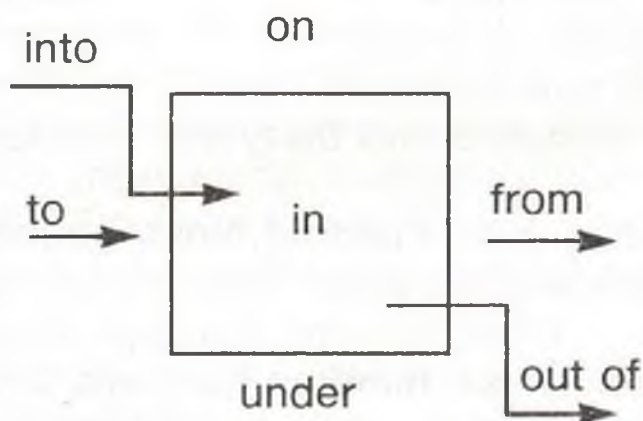
in May

in summer

in 1994

for an hour

from ... till ...



## Сполучник

Сполучник (the conjunction) - це службове слово, яке вживається для з'єднання членів речення і речень. За формою сполучники поділяються на прості (and, but, after, when, till), складні (as well as, as long as, as if), і складені (until, however, unless). (Таблиця найбільш уживаних прислівників, прийменників і сполучників надається у додатку)

## **Дієслово**

Дієслово (the verb) - частина мови, яка означає дію або стан. Дієслова бувають прості (to do, to speak), похідні - які мають суфікси та префікси (to dislike, to widen), складні - які утворюють значення за допомогою двох лексичних одиниць (to come in, to go on, to whitewash).

Дієслівні префікси:

re -: to retell, to rewrite, to reconstruct

dis -: to disappear, to disarm, to discharge

un -: to undo, to unload, to untie

Дієслівні суфікси:

-en: to shorten, to broaden, to strengthen

-fy: to signify, to clarify, to simplify

-ize: to organize, to memorize, to mobilize

-ate: to graduate, to separate, to demonstrate

### **Особові форми дієслова**

Виражають особу, число, час, стан, спосіб дії і у реченні мають функцію присудка: My brother lives in Poltava.

### **Неособові форми дієслова**

Інфінітив (the infinitive) To be or not to be...

Герундій (the gerund) I am fond of reading

Дієприкметник (the participle) A girl standing by the window.

Неособові форми дієслова не мають звичайних форм особи, числа, способу дії і не можуть бути присудком, хоча і бувають у його складі:

The doctor's duty is to treat patients.

We may not be back today.

1. Сміслові дієслова мають самотійне значення:

to do, to be, to have, to speak, to justify, to read

2. Допоміжні дієслова to do, to be, to have, shall, should, will, would (не завжди мають самотійне значення)

3. Модальні дієслова to be, to have, shall, should, will, would, can, may, must, ought

4. Дієслова-зв'язки (утворюють складені іменні присудки)



to be, to get, to become, to grow

### **Спосіб дієслова**

Спосіб дієслова показує, як мовець розглядає дію відносно дійсності. Є три способи:

1) Дійсний спосіб показує, що дія розглядається як реальний факт, у теперішньому, минулому і майбутньому:

Kate reads a book.

Kate read a book.

Kate will read a book.

2) Наказовий спосіб висловлює спонукання до дії, тобто наказ, прохання, пораду.

Open your book, please.

Read the text.

3) Умовний спосіб показує, що мовець розглядає дію не як реальний факт, а як щось допустиме чи бажане:

If I were you, I would not do it.

### **Стан дієслова**

В англійській мові є два стани дієслова: активний (the active voice) і пасивний (the passive voice):

Активний : I asked a doctor.

Пасивний : I was asked (by the doctor).

### **Основні форми дієслова**

Форма теперішнього неозначеного часу утворюється від форми інфінітиву без частки to в першій і другій особах однини і множини, а в третій особі однини до форми інфінітиву додається закінчення - (e)s. Правильні дієслова утворюють минулий неозначений час (past indefinite) і дієприкметник минулогочасу (past participle) за допомогою закінчення - -ed, яке додається до основного дієслова (інфінітива): to ask - asked - asked (+ed). При утворенні цих форм відбуваються зміни в орфографії, які добре видно у приведених прикладах:

1. to fly - flied - flied

2. to play - played - played

3. to live - lived - lived

4. to drop - dropped - dropped

5. to permit - permitted - permitted
6. to develop - developed - developed
7. to travel - travelled - travelled

Закінчення -ed вимовляється як:

[d] to live - lived - lived

[t] to help - helped - helped

[ɪd] to wait - waited - waited, to land - landed - landed

## Дієслово TO BE

Дієслово to be має особові форми: am, is, are, was, were.

Ф.	Ствердження	Питання	Заперечення
P r e s e n t	I am You are He     ] She     ] is It     ] We     ] You     ] are They     ]	Am I? Are you? Is     [ he? [ she? [ it? Are     [ we? [ you? [ they?	I am not You are not He     ] She     ] is not It     ] We     ] You     ] are not They     ]
P a s t	I was You were He     ] She     ] was It     ]	Was I? Were you? Was     [ he? [ she? [ it?	I was not You were not He     ] She     ] was not It     ]
	We     ] You     ] were They     ]	Were     [ we? [ you? [ they?	We     ] You     ] were not They     ]
F u t u r e	I shall be You     ] He     ] will be It     ] We shall be You will be They will be	Shall I be? [ you? Will     [ he     ] be? [ it? Shall we be? Will you be? Will they be?	I shall not be You     ] He     ] will not be It     ] We shall not be You will not be They will not be



1. Самостійне значення:

The students are in class (shall be, will be).

2. Допоміжне значення для утворення тривалих часів (Continuous Tense) і пасивного стану (Passive Voice):

She is \_o reading a book.

The article is written.

3. Модальне значення у сполученні з наступним інфінітивом для вираження необхідності виконати дію відповідно до попередньої домовленості чи за попереднім планом:

You are to do it.

4. Значення дієслова-зв'язки:

He is a doctor today.

Найбільш уживані вирази з дієсловом to be:

to be glad (pleased) — бути радим

to be happy (delighted) — бути щасливим

to be hungry — бути голодним

to be thirsty — хотіти пити

to be healthy (ill) — бути здоровим (хворим)

to be sorry — жалкувати

to be ready for something — бути готовим до чогось

to be late for something — спізнюватись на щось

to be sure (certain) of — бути впевненим у чомусь

something to be mistaken — помилятися

to be for (against) something — бути за (проти) чогось

to be busy with something — бути зайнятим чимось

### **Зворот TO BE GOING TO:**

Дієслово to go у Present Continuous з інфінітивом іншого дієслова означає намір виконати дію у найближчому майбутньому або надає їй відтінок обов'язковості, неминучості виконання дії, позначеної інфінітивом.

I am going to speak. Я буду говорити.

He is going to be a doctor. Він збирається бути лікарем.

Дієслово to go у Past Continuous з інфінітивом іншого дієслова виражає дію, що була майбутньою стосовно минулого часу. Частотаке сполучення виражає також намір здійснювати дію:

He was going to be a doctor. Він збирався стати лікарем.

What were they going to do? Що вони збиралися робити?

## Practice exercises.

Exercise 1. *Fill in the blanks with is, am, are.*

1. I ... student.
2. The man ... a doctor.
3. My friend ... in the hospital.
4. My father and my mother ... doctors.
5. They ... at the hospital.
6. ... you busy?
7. She ... a therapist.

Exercise 2. *Make the following sentences interrogative.*

*Translate them.*

1. You are a society member.
2. His elder brother is a student of medicine.
3. Her parents are at the hospital.
4. My friend has much knowledge in Anatomy.
5. They have no examinations this month.

Exercise 3. *Make the following sentences negative. Translate them.*

1. My father is a teacher.
2. He works at school.
3. His favourite subject is the English language.
4. Her friend makes much progress in his work.
5. The examinations were very difficult.

Exercise 4. *Answer the following questions.*

1. What is your father?
2. What are your friends?
3. Where are they now?
4. When did you enter the institute?
5. What subject did you like most?
6. Why do you like Anatomy?
7. Have you any friends at the institute?
8. Do you visit your friends?
9. Have you any difficulties in your study?
10. What is your favourite subject?



Exercise 5. *Fill in the blanks with the corresponding form of the verb to be.*

1. This ... a note. 2. These ... long texts, and those ... short texts. 3. ... this book good? 4. Those doors ... black. 5. That pencil ... not black. It ... red.

Exercise 6. *Make the sentences negative and then interrogative.*

1. This is a good tie. 2. That is a long text. 3. Those are big bags. 4. These rooms are clean. 5. That pencil is short. 6. His ties are red and black.

Exercise 7.

Are you a student? Yes, I am. No, I am not.

Are they teachers? Yes, they are. No, they are not.

Is it a pen? Yes, it is. No, it is not.

Am I a doctor? No, You are not. Yes, you are.

Was your brother an actor? Yes, he was. No, he was not.

Were you students last year? Yes, we were. No, we were not.

Shall I be a teacher? Yes, I shall. No, I shall not.

Will he be a doctor? Yes, he will. No, he will not.

Exercise 8. *Answer the following questions.*

- |                            |   |
|----------------------------|---|
| 1. Is this a text?         | 10. Is this a map or a plan?                |
| 2. Is that a note?         | 11. Is this a note or a plan?               |
| 3. Is it long?             | 12. Is this a tie or a cap?                 |
| 4. Are these pens?         | 13. Is it his or my tie?                    |
| 5. Are those pencils?      | 14. Is his name Tom or is it Ted?           |
| 6. Are they good?          | 15. Are those books thick or are they thin? |
| 7. Is this a cap?          | 16. Is this page ten?                       |
| 8. Is that a tie?          |   |
| 9. Are these pencils long? | ?   |

Exercise 9. *Fill in the blanks with the corresponding form of the verb TO BE.*

1. Ben ... my friend. 2. He ... a teacher. 3. I ... in my room. 4. «... Tommy and Billy my babies?» «Yes, they ...» 5. We ... students. 6. She ... a teacher. 7. ... you a student? 8. «... they doctors?» «No, they ... not. They ... students.» 9. This ... a cup.

It ... yellow. 10. The spoons ... on the table. The table ... in the room. 11. ... those men friends?

Exercise 10. *Put the questions to the following sentences.*

1. Fred is a doctor (a student).
2. Ann is my friend (Kate).
3. They are teachers (student).
4. Those cups are brown (yellow).
5. These pencils are short (long).

Exercise 11. *Answer the following questions.*

1. Are you a teacher?
2. Are you a student?
3. Are you a student or a teacher?
4. Is this boy a student?
5. Is he your friend?
6. Is your friend a doctor or not?
7. Am I a doctor?
8. Am I a student?
9. Am I a teacher?
10. Am I a teacher or a doctor?
11. Is your friend in the room?
12. Are they friends?
13. Are we in the room?
14. Is your baby in the room too?
15. Is Nick a doctor or is Jane?
16. Is Nick (Jane) a good or a bad doctor?
17. Is Nick a doctor or a teacher?
18. Is your book on the table or under it?
19. Is your map in your brief-case or on the table?
20. Is the teacher at the table or at the blackboard?
21. Is Peter at the door or at the table?
22. Are we at the table or at the door?
23. Is his map on his book or under his book?
24. Is his book in my bag or on this table?

Exercise 12. *Fill in the blanks with the prepositions. Translate the sentences.*

1. Please take that long pencil ... your brief-case, Nick, and put it ... the table.
2. The black pen is ... the table, the brown pen is ... my bag. The red pencil is ... that book.
3. Please take



these books ... the table. 4. Please go ... the blackboard.  
 5. Please close your book and put it ... your brief-case. It's ...  
 your brief-case now. 6. Please go ... the door and close it.  
 7. Please put a spoon ... your cup, Nick. 8. Please go ... the  
 room. 9. Please take a pen ... that student. 10. Nick is ... his  
 room now. 11. Please take your pen ... the table and put it ...  
 your bag, Jane. Now please take it ... your bag and put it ...  
 the book. 12. Please go ... your table and take your book ...  
 your bag. 13. Please look ... the black-board. 14. Please take  
 the cup ... Jane and put it ... the table.

### **Зворот there is (are)**

Зворот there is (are) вживається в значенні «знах-  
 одиться», «є», а також може не перекладатися.

There is a pen on the table.

There are two pens on the table.

There is no pen on the table.

There are no pens on the table.

There is not any pen on the table.

Is there a pen on the table? Yes, there is. No, there is not.

Are there pens on the table? Yes, there are. No, there are not.

Is there any pen on the table?

Are there any pens on the table?

Present Indefinite	Past Indefinite	Future Indefinite
There is (are)	There was(were)	There will be
There is not (are)	There was not (were)	There will not be
(Are) Is there ...?	(Were) Was there ...?	Will there be?

Exercise 13. *Translate the following sentences.*

There is a mistake in the sentence. There are a lot of new words in this lesson. Is there the museum in this street? What is there for breakfast today. There is not any University in our town.

Exercise 14. *Make the following sentences negative and interrogative.*

1. There (is,are) a large table in my room. 2. There (is,are) three windows in our classroom. 3. There (is,are) a book and a pen on the table. 4. There (is,are) a textbook and two exercise-books on the table. 5. There (was,were) many students in the hall.

Exercise 15. *Answer the following questions.*

1. What is there on the table?
2. How many books are there on the table?
3. What kind of books are there on the table?
4. Is there a blackboard in your classroom?
5. How many pages are there in this book?
6. How many cinemas are there in the centre of Poltava?
7. How many institutes are there in your hometown?
8. How many mistakes were there in your dictation?
9. Were there many students in the hall?
10. What is there on the wall?

Exercise 16. *Put questions to the underlined words.*

1. There are five chairs in the room. 2. There is a nice park in the center of our city. 3. There were three mistakes in my dictation. 4. There are some books on my table. 5. There are some students in the classroom



## Дієслово TO HAVE

Дієслово to have має дві форми - have і has у теперішньому часі (The Present Indefinite Tense), had - у минулому (The Past Indefinite Tense). Заперечні форми: have not - haven't, has not - hasn't, had not - hadn't.

Стверджувальна форма	Питальна форма	Заперечна форма
I have a book. He has a book. She has a book. It has coloured picture. We have a book. You have a book. They have a book.	Have I a book? Has he a book? Has she a book? Has it coloured picture? Have we a book? Have you a book? Have they a book?	have no book. He has no book. She has no book. It has no coloured picture. We have no book. You have no book. They have no book.
I had a book. He had a book. She had a book. It had a coloured pictures. You had a book. We had a book. They had a book.	Had I a book? Had he a book? Has she a book? Had it coloured pictures. Had you a book? Had we a book? Had they a book?	had no book. He had no book. She had no book. It had no coloured pictures. You had no book. We had no book. They had no book.
I shall have a book. He will have a book. She will have a book. It will have coloured pictures. We shall have a book. You will have a book. They will have a book.	Shall I have a book? Will he have a book? Will she have a book? Will it have coloured pictures? Shall we have a book? Will you have a book? Will they have a book?	Shall have no book. He will have no book. She will have no book. It will have no coloured pictures. We shall have no book. You will have no book. They will have no book.

Дієслово to have може використовуватися як:

1) Самостійне дієслово у значенні мати, володіти:

We have an examination.

2) Допоміжне дієслово для утворення перфектних часів (The Perfect Tenses):

I have bought a type-recorder.

3) Модальне дієслово, що виражає необхідність за певних обставин:

I have to go at 6 o'clock.

a) 1. Mary has got a family. 2. Jane has got a lot of children.

3. I've got a wife. 4. My children have got a lot of friends.

b) 1. They have the English in the morning. 2. They had a dictation yesterday.

c) 1. I often have a lot of work to do. 2. I've got a lot of work to do today. 3. She had a lot of work to do last week.

I've got a family. I haven't a family. Have you got a family? (a sister, a friend, a wife, mother, father, skates, skis, English (French, German) magazine, a textbook, a question); to have breakfast (supper), dictation, test, classes, English, (German, French).

a) 1. Have you got a family?

2. How many children have you got?

3. Have you got a son?

4. Which of your friends has not got a family?

5. Which of you has a sister?

b) 1. How often do you have English classes (dictations, tests)?

c) 1. Which days do you have much work to do?

2. Have you got much work to do now?

3. When do you usually have time to go to the cinema?

4. Have you got time to go to the theatre tonight?

5. Has your child got a cold now?

### **Зворот HAVE (HAS) GOT**

Ex.1. *Train the following examples and translate them.*

1. Have you got many books at home. Yes, I have got many.

No, I have not got any.



2. She has not got any friends.

How many friends have you got?

3. Has a girl got a cold? Yes, she has got.

No, she has not cold but she is unwell.

Ex.2. *Make sentences according to the model using the words giving below.*

I have got a family. I have not got a family. Have you got a family? (a question, an English magazine, books...)

Найбільш уживані вирази з дієсловом to have:

to have breakfast (dinner, supper) — снідати, (обідати, вечеряти)

to have a talk — розмовляти

to have a walk — погуляти (поплавати)

to have a good time — добре проводити час

to have a look — поглянути

to have something done — зробити щось

### **Дієслово TO DO**

Дієслово to do має дві форми - do і does у теперішньому часі (The Present Indefinite Tense) і did у минулому часі (The Past Indefinite Tense). Заперечні форми: do not - don't, does not - doesn't, did not - didn't. Дієслово to do може використовуватися як:

1) Самостійне дієслово у значенні робити, виконувати:

He did this exercise.

2) Допоміжне дієслово для утворення питальної і заперечної форми теперішнього неозначеного часу (The Present Indefinite Tense) і минулого неозначеного часу (The Past Indefinite Tense) і заперечної форми наказового стану:

He does not learn this rule.

He did not go to the institute.

Don't be angry.

Don't do this work.

3) Підсилювальне дієслово до наступного самостійного дієслова у стверджувальному реченні:

Do come in! - He did come. -

#### 4) Замінник попереднього дієслова:

He speaks as well as I do.

#### **Дієслова shall (should), will (would)**

1. shall (will)- допоміжні дієслова для утворення форм майбутнього часу (The Future Tense): для першої особи однини і множини, для другої і третьої особи однини і множини (will):

I (we) shall; you (they, he, she, it) will.

Should, would вживається для утворення майбутнього часу в минулому (the future-in-the-past tense):

He said that he would come.

2. Shall вживається як модальне дієслово для вираження твердого наміру (у першій особі) і готовності, обов'язку щось зробити (у другій і третій особах):

We shall overcome; He shall do as I say.

У питальних реченнях вживається для вираження пропозиції або прохання щось зробити:

Shall I begin?

3. Will може вживатися як модальне дієслово (у першій особі) для вираження бажання, наміру:

We will help you.

4. Should може вживатися як модальне дієслово для вираження обов'язку, поради, наказу:

You should give me this book.

5. Would, ought вживаються для вираження ввічливого прохання або відмови:

Would you give me the book, please?

Повні і короткі форми у розповідному реченні:

I shall - I'll

I should - I'd

We shall - We'll

We should - We'd

You will - You'll

You would - You'd

He will - He'll

He would - He'd

It will - It'll

It would - It'd



shall not - shan't, will not - won't, should not - shouldn't, would not - wouldn't.

## **Основні модальні дієслова.**

До основних модальних дієслів (modal verbs) належать can, must, may. Після цих дієслів вживаються смислові дієслова без частки to.

Модальні дієслова мають особливості:

1). Не змінюються за особами і числами (тобто не мають закінчення -(e)s у третій особі однини):

He can dance.

2). Не мають неособових форм: інфінітива, герундія і дієприкметників.

3). Питальну та заперечну форми утворюють самотійно, без допоміжного дієслова:

May I come in? You may not.

4). Can, may мають форми теперішнього і минулого часу (could, might), а дієслово must вживається лише у теперішньому часі.

Повні і короткі форми основних і модальних дієслів:

can - cannot, can not - can't

could - could not - couldn't

might - might not - mightn't

shall - shall not - shan't

should - should not - shouldn't

will - will not — won't

would - would not — wouldn't

must - must not — mustn't

## **Can (could)**

Дієсловосан в сполученні з інфінітивом вживається для вираження можливості чи вміння виконати дію, перекладається як: могли, уміти, бути спроможним і в українській мові стосується теперішнього і майбутнього часу:

He can speak English. Він уміє (може) розмовляти англійською.

We can do this work tomorrow. Ми зможемо зробити цю роботу завтра (наступного дня).

У значенні can (could) може вживатися також і словосполучення to be able to у минулому, теперішньому і майбутньому часі:

They were (are, will be) able to finish their work in time.

Вони змогли (можуть, зможуть) зкінчити роботу вчасно.

### **May (might).**

Дієслово may у сполученні з інфінітивом вживається для вираження дозволу і прохання, можливості, припущення і перекладається так: могли, мати змогу, можливо, мабуть.

You may take my book. Ви можете скористатися моєю книгою.

May I come in? Чи можна увійти?

You may come any time. Ви можете прийти у будь-який час.

Для вираження дозволу у значенні may (might) може вживатися словосполучення to be allowed to у минулому, теперішньому і майбутньому часі.

Дієслово may може виражати побажання, надію:

May all your dreams come true.

### **Must**

Дієслово must має лише одну форму і виражає необхідність, обов'язок і перекладається як: треба, необхідно, мушу, маю, повинен, зобов'язаний.

You must bring this magazine.

У значенні must може вживатися сполучення to have to в минулому, теперішньому і майбутньому часах:

She had (has, will have) to buy some books.

Вона мала (має) придбати зошити.

### **Дієслово should, ought**

Дієслово should і ought майже не різняться за значенням. Кожне з них має лише одну форму. Should вживається з інфінітивом без частки to. Після ought інфінітив вживається з часткою to. Дієслова should і ought вживаються з різними формами інфінітива.



## Модальне дієслово to have

Дієслово to have, вжите як модальне, виражає необхідність чи обов'язковість дії, зумовленої обставинами. На відміну від інших модальних дієслів дієслово to have має форми інфінітиву, дієприкметника і герундія і може вживатися в часових формах, яких не мають інші модальні дієслова, зокрема в майбутньому часі. З модальним дієсловом to have вживається лише Indefinite Infinitive з часткою to:

I have to get up the next morning at seven.      Завтра вранці я маю вставати о сьомій годині.

I had to sell most of my things.      Я змушений був продати більшість своїх речей.

You'll have to go home now.      Вам доведеться зараз піти додому.

Питальна і заперечна форми модального дієслова to have у Present Indefinite і Past Indefinite утворюються з допоміжним дієсловом to do:

Do we have to sleep with him here?      Ми мусимо спати з ним тут?

You don't have to go in.      Вам не обов'язково заходити.

You did not have to think about it.      Вам не треба було думати про це.

## Modal Verbs and their Equivalents.

must — to have to	can — to be able to	may — to be allowed to
Present	Past	Future
I must do it He must do it I have to do it He doesn't have to do it	I had to do it He didn't have to do it	I'll have to do it He'll have to do it
You can do it They can't do it You are able to do it They aren't able to do it	You could do it They couldn't do it You were able to do it They weren't able to do it	You will be able to do it They won't be able to do it

Present	Past	Future
He may do it We may not do it He is allowed to do it We are n't allowed to do it	He might do it We mightn't do it He was allowed to do it We weren't allowed to do it	He'll be allowed to do it We won't be allowed to do it

**Modal Verbs.**  
(Word Order)

I can speak English He must learn English You may take the book				
	Can	you	speak English?	Yes, I can. (No, I can't)
	Must	he	learn English?	Yes, he must. (No, mustn't)
	May	I	take the book?	Yes, you may. (No, you may not)
What	must	he	learn?	He must learn English.
language	can	you	speak?	What I can speak English.
What	may	you	take?	I may take the book.

**Modal verb can**

Exercise 1. Make up five sentences from each table. Translate them.

I He She We You They	can cannot could could not couldn't can't	speak English translate the text answer this question tell him the text take care of a patient make notes of a lecture
-------------------------------------	--	---



Can Can't Could Couldn't	I he she we you they	play tennis? attend lectures regularly? deliver clearly? have possibility to pass the exam? perform the lab? work successfully? pass several credit test?
-----------------------------------	-------------------------------------	---

I He She We You They	will shall (not) 'll	be able to brake a record to carry the child to get there in time to ring you up to remember this rule to find this medicine
-------------------------------------	----------------------------	--

I He She We You They	could have (not)	prepared a report on Anatomy gone there done this work found a valuable remedy been cured of this disease done any harm to this patient
-------------------------------------	------------------	--

I He She We You They	can't couldn't	be at the institute in time know this article have said it be waiting for the classes have been teaching for many years have insulted you
-------------------------------------	-------------------	--

Can Could	I He she we You They	be preparing for an examination now? be at the hospital at such an hour? study English well? have fallen ill? require great care? have everything required?
--------------	-------------------------------------	--

Exercise 2. *Make the following interrogative and negative.*

1. Peter can make a shelf.
2. Ann could go there yesterday.
3. His friend will be able to help him on Sunday.
4. Our students can read and speak English.
5. They will be able to reach the hospital before Mark.
6. The nurse on duty can show you the way to the therapeutic department.
7. He could buy this medicine beforehand.
8. Soon you will be able to make a diagnosis.

Exercise 3. *Answer the following questions in the written form.*

1. Can you speak German?
2. Could you speak English three years ago?
3. Can you operate appendicitis?
4. Will you be able to make a diagnosis?
5. Where can I find the doctor's department?
6. What instrument could he use?

### May

Exercise 1. *Make up five sentences from each table. Translate them.*

I He She We You They	   may might have	be at the hospital now. be ill. come on Monday. have forgotten about it. learned English at school. fallen ill.
May	I he she you they	take this medicine. use cups or mustard plasters. go to X-raying. go to the cinema this evening. follow a bed regimen.
I He She We You They	   may	find him at home only in the evening. buy such a remedy at a drug-store. borrow this book at the library. take a trolley-bus. spend a holiday at the sea-side. go there by train.



I		be more careful.
He		have done this much better.
She	might	listen to me more attentively.
We		have told me about it before.
You		have sent him a telegramme.
They		keep silent while I am speaking.

Exercise 2. *Paraphrase the following sentences referring them to the future and to the past. Translate them.*

Model: - I may keep this magazine till Monday.

- I shall be allowed to keep this magazine till Monday.

- I was allowed to keep this magazine till Monday.

1. We may occupy this room.
2. He may stay away from the institute.
3. These patients may spend the night at home.
4. You may see this prescription.
5. She may work in the laboratory.
6. The students may go to this meeting.

Exercise 3. *Change from direct into indirect speech. Translate the sentences.*

Model: The professor said to the students: «You may go home».

- The professor told the students that they might go home.

1. Mother said to her son: «You may go to the cinema».
2. The doctor said to a sick man: «You may be discharged from the hospital».
3. He said to me: «You may look at it».
4. The girl said to her friend: «You may work in my room».
5. Professor Petrov said: «You may write it down».

Exercise 4. *Paraphrase the following sentences using the verb may. Translate them.*

1. Perhaps she has brought the dictionary.
2. It is possible that they are in the park.
3. Perhaps a letter will come to you today.
4. It is possible that these patients know the procedures.

5. Perhaps she read this case history.
6. It is possible that she has gone to the hospital.
7. Maybe, they left for the doctor.

Exercise 5. *Paraphrase the following using the verb may.*  
*Translate sentences.*

Model: I nearly lost my way. I might have lost my way.

1. I nearly forgot about it.
2. This medicine nearly cured the patient.
3. She nearly fell ill.
4. I nearly caught cold.

### Must

Exercise 1. Make up five sentences from each table. Translate them.

I	must	get up at six o'clock.
He		learn this material by heart.
She		go to bed at once.
We		work hard to know Anatomy well.
You		prepare the report on Monday.
They		made necessary analysis on Friday.
		be lying in bed now.
		be ill.
		be angry with me.
		be afraid of him.
		have passed the examination.
		have been waiting for the help.
		get up in the early morning.

Exercise 2. Make the following sentences interrogative and translate them.

1. You must air the room twice a day.
2. Children must sleep not less than nine hours a day.
3. A student on duty must clean the classroom.
4. She must help the doctor in making manipulations.
5. You must read English books and do exercises every day.



6. Everybody must go in for sports.
7. You must attend lectures regularly.

Exercise 3. Give negative answers to the following questions.

Model: May I take this book home?

No, you must not. You must not take it home.

1. May I open the window?
2. May I take this medicine?
3. May I play tennis today?
4. May I smoke at the institute?
5. May I tell my friend about it?

Exercise 4. Paraphrase the following sentences referring them to the past and future. Translate them.

Model: I must go at once. - I had to go there at once. - I had to put it there. - I shall have to go there at once.

1. I must catch up with my class.
2. The chemist must sell the medicines.
3. She must turn on the radio.
4. You must be there at once.
5. The nurse must water the flowers.
6. His sister must go shopping.
7. If you have high temperature you must stay at home.
8. You must work at the reading hall.

### Should. Ought

Дієслова *should* і *ought* майже не різняться за значенням. Кожне з них має лише одну форму. *Should* вживається з інфінітивом без частки *to*. Після *ought* інфінітив вживається з часткою *to*. Дієслова *should* і *ought* вживаються з різними формами інфінітива.

Дієслова *should* і *ought* виражають моральний обов'язок (з точки зору того, хто говорить), пораду, рекомендацію. У цих значеннях *should* і *ought* вживаються з різними формами інфінітиву.

Сполучення *should* і *ought* з Indefinite Infinitive виражають дію стосовно теперішнього або майбутнього часу:

You ought to go to see him again.

You should see him.

Exercise 1. *Make up five sentences from each table. Translate them.*

I	should	visit him.
He	shouldn't	help her.
She	ought to	take your friend to the doctor.
We	oughtn't to	be more attentive.
You		know the rules.
They		be listening to the teacher.

I	should	have come here yesterday.
He	shouldn't	have done it.
She	ought to	have invited them.
We	oughtn't to	have found the source of infection.
You		have gone there.
They		have prepared the mixture.

### Модальне дієслово to have

Exercise 2. *Make up five sentences from each table. Translate them.*

I	do		to make a report
He	does		to buy it
She	did	not have	to give up smoking
We	shall		to lock the room
You	will		to learn it by heart
They			to take a bus.

I	have	to stay in for a few days.
He	has	to tell him the truth.
She	had	to borrow five grivens.
We	will have	to call in a doctor.
You	shall have	to take my temperature.
They		to take the electrocardiogramme.



Do	I	have	to pay for it.
Does	he		to cook supper.
Did	she		to get up early.
Will	we		to look after the children.
Shall	you		to wash the dishes.
	they		to take the entrance exams.

### Модальне дієслово TO BE.

Дієслово to be як модальне вживається лише в двох часах: Present Indefinite і Past Indefinite.

I am to come in time. Я маю прийти вчасно.

She was to come in time. Вона має прийти вчасно.

З модальним дієсловом to be в Present Indefinite вживається лише Indefinite Infinitive.

Після to be в Past Indefinite вживається також Perfect Infinitive, який вказує на те, що виражена ним дія не відбулася.

She was to have come in time. Вона мала прийти вчасно (але не прийшла).

Exercise 1. *Make up five sentences from each table.*

I	am	to live for Kyiv on Monday.
He	is	to take part in the competition.
She	are	to return tomorrow.
We	were	to invite him.
You	was	to do it right now.
They		to perform this work.

I	was	to have met him in the park.
He	were	to have come yesterday.
She		to have finished school last year.
We		to have written a letter.
You		to have aired the room.
They		to have prepared the ward for the patient.

## Модальне дієслово SHALL.

Модальне дієслово shall, вжите з Indefinite Infinitive основного дієслова, означає дію стосовно майбутнього часу у стверджувальних і заперечних реченнях. Модальне дієслово shall вживається у другій і третій особах для вираження наказу, попередження, поради, обіцянки.

You shall go there. Ти підеш туди!

You shall not do it. Не роби цього!

У питальних реченнях shall вживається у 1, 3 особах при звертанні за розпорядженням вказівкою.

Shall I come to you? Прийти до вас?

Shall she come to you too? Їй прийти і до вас?

Exercise 1. *Make up five sentences from each table. Translate them.*

He	shall	get a new flat next year.
She		miss the train.
You		catch the flu.
They		stay here.
		to go to the Zoo on Sunday.
		make notes of a lecture.

Shall	he	open the windows?
	she	read?
	you	translate the sentences?
	they	do this exercise in a written form?
		clean the blackboard?

## Модальні дієслова will і would.

Подібно до shall і should дієслова will і would вживаються не тільки як допоміжні для утворення майбутнього часу і умовного способу, а й як модальні. Модальні дієслова will і would вживаються у першій особі в стверджувальних і заперечних реченнях для вираження волі, бажання, наміру. Як модальне дієслово will вживається стосовно майбутнього і теперішнього часів:

We will help you. Ми допоможемо вам.

I will not go there. Я не піду туди.



Would у цьому значенні вживається в підрядних додаткових реченнях, де дієслово-присудок вжито у минулому часі:

He said that we would help you. Він сказав, що ми допоможемо вам.

У питальних реченнях will, would вживаються у другій особі для вираження прохання, запрошення, would надає ввічливого відтінку:

Will you have a cup of coffee? Вип'єте чашку кави?

Won't you sit down. Сідайте будь ласка.

Would you like another cup of coffee? Вип'єте ще чашку кави?

- Will you have a cup of tea?
- Won't you sit down?
- Would you help me?
- Would you like some coffee?
- The knife won't cut.
- The window wouldn't open.

Exercise 1. *Paraphrase the following using the verbs will and would. Translate the sentences.*

Model: Close the window, please. - Will (would) you close the window.

I shall willingly buy it. - I will buy it.

I can't write with this pen. - This pen won't write.

- A. 1. Come in, please.  
2. Pass me the salt, please.  
3. Please, wait for me a little.  
4. Give me your pen, please.  
5. Turn on the light, please.
- B. 1. I shall willingly play chess with him.  
2. We shall willingly work in the field in summer.  
3. We shall willingly go to the theatre this evening.  
4. I shall willingly help you.

- C. 1. I can't open the window.  
 2. I could not turn on the TV set.  
 3. I can't cut bread with this knife.  
 4. We can't work with this machine.  
 5. She couldn't close the suitcase.

### Дієслово NEED

Дієслово need вживається як модальне і як смислове. Як модальне need у сполученні з Indefinite Infinitive виражає необхідність виконання стосовно теперішнього або майбутнього часів і вживається у питальних і заперечних реченнях.

Як модальне дієслово need має лише форму теперішнього часу:

You need not be there. Вам не треба бути там.  
 Need we write it down? Нам треба записати це?

I	needn't	do this exercise in a written form.
He		have learned these words.
She		be afraid of injections.
We		have called the doctor.
You		look the door.
They		seek for some money.

Need	I	say it to you?
	he/she	trouble him with such a thing?
	we	repeat the trouble?
	you	do it again?
	they	put on a coat in such a cold weather?

### Види речень.

Залежно від мети висловлювання речення поділяються на розповідні, питальні, наказові й окличні. У розповідних реченнях дотримується прямий порядок слів і за своєю організацією вони не становлять особливих труднощів. Щодо питальних речень, то завдяки деяким структурним відмінностям від української мови, вони потребують



ретьного вивчення. Тому ми зупинимося на чотирьох типах питальних речень (interrogative sentences), або питань (questions): загальних, спеціальних, альтернативних, та роз'єднувальних. Для будови всіх типів питань існує певна закономірність. Насамперед необхідно добре засвоїти, як утворюється загальне питання, яке фактично модифікується в решті питань.

Загальні питання (general questions) — це такі питання, які починаються з допоміжних або модальних дієслів, а також смислових дієслів to be, to have.

Допоміжне дієслово (модальне дієслово)	Підмет	Присудок	Інші члени речення
Do	your parents	live	in a town?
Do	your parents	have	a flat?
Does	his friend	play	the piano?
Does	his friend	have	a tape-recorder?
Did	her sister	buy	a book?
Did	her sister	have	a typewriter?
Will	they	be	in time?
Shall	I	phone	you?
Are	the children	playing	in the yard?
Is	this device	used	in industry?
Am	I	invited	to the party?
Have	you	been	to Sevastopol?
Has	she	done	her homework?
Can	your brother	speak	German?
May	I	ask	you a question?
Must	we	go	now?
Should	they	bring	the documents?
Are	you		a driver?
Is	she		a programmer?
Am	I		tired?
Was	he		ill?
Were	they		in India?
Have	you		a dictionary?
Has	she		a pen?
Had	he		an umbrella?

## **Часи англійського дієслова**

У англійській мові вживається 12 часових форм (tenses). Англійське дієсловом має форми основних часів: теперішнього (the present), минулого (the past), і майбутнього (the future). У всіх групах цих часів існує також особлива форма відносного часу the Future-in-the-Past - майбутнє відносно минулого. Неозначені часи (теперішній неозначений час) (Indefinite Tenses).

### **Теперішній час**

( The Present Indefinite Tense )

Утворення. The Present Indefinite Tense збігається з формою інфінітива (без частки «to») в усіх особах крім третьої особи однини, яка приймає закінчення «-s»:

I (we,you,they) work, he (she,it) works.

Вживання. The Present Indefinite Tense виражає дії, притаманні якійсь особі чи предмету. Для вираження теперішньої дії вживаються такі обставини часу: often, always, every day (week, month, year).

He goes to the institute every day.

I go to the Institute every day.

### **Минулий неозначений час**

( The Past Indefinite Tense )

Утворення. The Past Indefinite правильних дієслів утворюється за допомогою закінчення «-ed». Неправильні дієслова утворюють цей час по-різному (дивись список неправильних дієслів). Питальна, а також питально-заперечна форми утворюють аналогічно до цих форм у теперішньому часі, але з використанням допоміжного дієслова «did» замість «do».

I asked him. He went home.

### **Майбутній неозначений час**

Утворення. The Future Indefinite Tense утворюється за допомогою дієслів «shall» (для першої особи однини і множини) і «will» (для інших осіб).

The Future Indefinite Tense вживається для вираження дії, яка відбудеться у майбутньому. Для вираження майбутньої дії



вживаються такі обставини часу, як tomorrow, next week, in a week.

They will come tomorrow.

### Спеціальні питання

Спеціальні питання (special questions) починаються питальними словами who? (хто) what? which? (що, який?), where? (де, куди?) when? (коли?) whose? (чий, чия, чиє?) how much? how many? (скільки) тощо.

Вони базуються на загальному питанні (без того члена речення, до якого поставлено питання) крім випадків, коли питання ставиться до підмета або його означення:

Where do your parents live? Who lives in a town? (у питаннях до підмета не вживається дієслово й зберігається прямий порядок членів речення).

		<u>My</u>	<u>father</u>	<u>reads</u>	<u>a book</u>	<u>at home</u>
Who		-	-	+	+	+
Whose		-	+	+	+	+
What	D	+	+	+	-	+
Where	O	+	+	+	+	-
How	E	+	+	+	+	+
When	S	+	+	+	+	+
Why		+	+	+	+	+
...						

### Альтернативні питання

(alternative questions)

передбачають вибір із двох речей, осіб, дій, явищ тощо, їх можна поставити до будь-якого члена речення. У основі лежить загальне питання:

Yesterday my friends bought two magazines.

Did my friends buy two new magazines or newspapers?

Did my friends buy two new or old magazines?

Did my friends buy two or three new magazines?

Did my friends buy or sell two new magazines?

Did my friends or your friends buy two new magazines?

## Роз'єднувальні питання

Роз'єднувальні питання (disjunctive questions) має дві частини - перша, стверджувальна або заперечна, з прямим порядком слів, а друга - коротке заперечне загальне питання, якщо перша частина - стверджувальна, і навпаки, коротке стверджувальне загальне питання якщо перша частина - заперечна:

My friends got two new books, didn't they?

My friends didn't get two new books, did they?

(Друга частина завжди містить займенник, відповідний підметові, і перекладається українською мовою чи (хіба) не так?)

Деякі особливості роз'єднувальних питань:

His friends live in Poltava, don't they?

His friends live in Poltava, do they not?

His friends don't live in Poltava, do they?

She has brought a pencil, hasn't she?

She hasn't brought a pencil, has she?

There were many students in the streets, weren't there?

## Practice Exercises.

### The Present Indefinite Tense.

Make 4-5 sentences from each table. Translate the sentence.

Do	I	speak English?
	He	do exercises?
	She	make injections?
Does	We	study Anatomy?
	You	correct a diagnoses?
	They	take examinations?

I	do not	work at the surgical department
He	(don't)	carry out this experiment
She	does not	get a appointment
We	doesn't	find any difference
You		complete nessessary manipulation
The		



Where When How	do  does	I he she we you they	live? work? operate? make an experiment? gain knowledge? carry out the laboratory work?
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WHO whose sister which of you which of these patients what whose instruments	lie on the table? studie(s) at the institute? work(s) in the laboratory? know(s) the subject? live(s) in Poltava? perform(s) the operation?
---	--

I He She We You They	goes to the hospital play football takes one's temperature call in a doctor make a diagnoses fall ill	every day in the morning at seven o'clock in winter once a week at once
-------------------------------------	--	--

Exercise 1. *Put the following into the plural.*

Model: The boy goes to school. - The boys go to school.

1. The girl learns English.
2. My friend gets up early.
3. The worker comes home at six.
4. My brother works at a factory.
5. His uncle lives in Poltava.
6. The bus runs quickly.

Exercise 2. *Put the following into singular.*

Model: The pupils work hard. - The pupil works hard.

1. The engineers go to the plant.
2. The pupils do their home-work.
3. The trees grow well.
4. The boys go in for sports.
5. My friends study English.
6. Girls sing very well.

Exercise 3. *Make up five sentences from each table.*

I	goes	to school every day
He	play	basketball in the morning.
She	gets up	at eight o'clock.
We	swim in the river	in winter.
You	take a bus	on Sundays.
They	skate	once a week.

Do	I	speak English?
Does	he	play the piano?
	she	work at school?
	we	teach history?
	you	live in that house?
	they	learn French?

I	do not	learn German.
He	(don't)	go to school on Sunday.
She		play hockey in summer.
We	does not	like this film.
You	(doesn't)	read that newspaper.
They		work here.

Exercise 4. *Make the following sentences interrogative and negative.*

1. The children drink coffee in the evening. 2. Her sister dances very well. 3. Our grandmother grows potatoes. 4. The pupils remember this rule. 5. Nick goes to bed at ten. 6. They listen to the the radio in the morning. 7. You meet him every day. 8. It often snows in November. 9. You want to play chess with him. 10. His mother teaches geography at schools. 11. My cousin wants to become a doctor. 12. She takes a bus.

Exercise 5. *Ask questions as in the models.*

Models: Ask me if I work here.- Do you work here?

Ask me if my sister works here.- Does your sister work here?

Ask me:

1. if I remember my first teacher; 2. if my brother lives in Odessa;



3. if I spend my holidays in the Crimea; 4. if my students make mistakes in their dictation; 5. whether I speak French; 6. whether my daughter speaks French; 7. whether my children speak French; 8. if I live in a new house.

Ask one of your friends:

1. if he goes in for sports; 2. if he likes to play volley-ball; 3. if he travels much; 4. if he collects stamps; 5. if he wants to become a tractor driver; 6. if he wants to take a walk; 7. whether he plays tennis; 8. if he comes home late; 9. if his mother comes home late; 10. if his parents come home late; 11. if his friends like to dance; 12. if his father works at a factory.

Exercise 6. *Make up 5 sentences from each table.*

Where	do does	I he we you they	live? work? she study? buy milk? play tennis? skate?
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When At what time	do does	I he she we they	go shopping? come from school? play basketball? get up? you go to bed? watch television?
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How	do does	I he she you they	speak English? play the piano? dance? we sing? get to school? study?
-----	------------	-------------------------------	--

Who Whose sister Which of you Which of these girls	lies on the table? studies at the university? stands at the wall? works at that plant?
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Exercise 7. *Put the following into the plural.*

1. The girl learns English.
2. Nick gets up early.
3. The doctor comes to the hospital at eight.
4. He works at the new hospital.
5. His uncle lives in Poltava.

Exercise 8. *Put the following into the singular.*

1. The engineers go to the factory.
2. The students do their homework.
3. These girls go in for sports.
4. We study English.

Exercise 9. *Make up five sentences from each table.*

Where When At what time How	do does	I he she we you they	play football? play tennis? buy books? study? live? watch TV? come home from the Academy? get up in the morning?
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Who Whose friend Which of you Which of your group What Whose things	lives in Poltava? studies at the Academy? works at the hospital? knows English well? is there on the table? is there on the blackboard?
--	--

Exercise 10. *Put questions as in the model.*

Model: Ask one of the students where he/she lives.- Where do you live?  
When he/she does his/her work; who makes his/her bed; what he/she wants to be after the Academy; when he/she gets up in the morning; where he/she keeps things; what his/her relatives do in the evening; when they go to the cinema/theatre; how he/she learns English.



Exercise 11. *Put questions (as more as possible to the following sentences.*

1. They read books in the reading-hall. 2. His parents live in the country. 3. My brother studies at the Academy. 4. She spends her summer holidays. 5. Her mother works at the laboratory. 6. There are many students in the hall. 7. There is a book on the table. 8. There are boys and girls in our group. 9. I go to bed at 11. 10. My friend knows English very well. 11. My father reads newspapers at home in the evening. 12. Our teacher likes music. 13. Children at school learn English. 14. It rains in autumn. 15. Pete helps his parents to grow potatoes. 16. Valentine teaches her daughter foreign languages. 17. Nick and his friends build a new house in the village. 18. Roman works hard at the text book. 19. All in our group are Ukrainians. 20. Our professors teach us Anatomy, Histology, Biology, Chemistry and other subjects. 21. Ukraine is an independent state. 22. Ukrainian Medical Dental Academy was established in 1921. 23. Students from many countries study at the Academy.

Exercise 12. *Answer the following questions.*

1. At what time do you get up in the morning? 2. What do you do in the morning? 3. What do you have for breakfast? 4. What do you do then? 5. At what time do your studies begin? 6. How many subjects do you study during the first year? 7. What is your favourite subject? 8. What subject is the most difficult for you? 9. How many lessons do you have every day? 10. What do you usually do after classes? 11. Do you go to the reading-hall? Do you go in for sports? Do you like music? 12. When do you usually do your homework? 13. Is it difficult for you to study at the Academy? 14. Do your friends help you? 15. How many of you are in the group? 16. Which is the best student in your group? 17. Who is the monitor in your group? 18. How do you spend your free time? 19. Do you like to watch TV programmes? 20. What kinds of books do you like most? 21. When do you go to bed?

Exercise 13. *Make up a dialogue using the following table.*

<p>A: Do you Does your friend</p>	<p>play football drink tea like milk buy clothers eat meat &amp; fish go to the theatre go shopping</p>	<p>every day? every time? ones a day? usually? always? sometimes? seldom? after meals? after meals?</p>
<p>B: Yes ,I do. No,I don't. A: Why do you? Why not ? B: Because I</p>	<p>don't like it. have not money. haven't enough time. am not fond of it. amn't interested in it.</p>	

Exercise 14. Fill in the blanks with am, is, are. 1. I ... a student. 2. This man ... our teacher. 3. My friend ... in the second group. 4. We ... students of the first year. 5. My father..not a teacher, he ... a doctor. 6. The students .. in the classroom. 7. Our teacher of English ... a young lady.

Exercise 15. *Make the following sentences negative and interrogative.*

1. You are a student. 2. He is a doctor. 3. My elder brother is a teacher. 4. My parents are in the country. 5. His car is in the street. 6. They are good in English. 7. She is a nice girl. 8. The hospital is in Shevchenko street. 9. My little cousin is a school-boy. 10. Your friend is an engineer. 11. That is my fellow student.

Exercise 16. *Fill in the blanks with have, has.*

1. I ... a good friend. 2. My parents ... a new flat. 3. My neighbour ... a red car. 4. They ... a village house. 5. You ... a good English dictionary. 6. Some of my friends ... good knowledge of English. 7. Many students in our group ... relatives in the country.



Exercise 17. *Make up sentences from each table.*

Have Has	she	a sister?
	he	a friend in a group?
	we	a house in the country?
	you	many English books at home?
	I	a new English-Ukrainian dictionary?
	they	blue/ red/ black/ white/ yellow / brown/ green car?

Do Does	she	have	dinner after classes?
	he		coffee at the institute?
	we		friends in England, the USA?
	you		pleasant time there?
	I		the work to do?
	they		

I he she we you they	have not (haven't)	a car?
	has not (hasn't)	any friend here?
		new dictionary at home?
		this book with me?
		much money?
		the text book for this lesson?

I he she we you they	have	no	newspapers at home.
	has		books in my bag.
			watch on my wrist.
			idea what to do.
			TV-set at the hospital.
			need to go so far.

I he she we you they	do not (don't)	have	dinner at the institute.
	does not (doesn't)		breakfast at the morning.
			a bath in the daytime.
			a walk before going to bed.
			holidays this year.
			a camera with me.

Exercise 18. *Make the following negative and interrogative.*

1. Taras has a new tape recorder at home. 2. Mysister has two daughters and a son. 3. The students have four lessons a day. 4. I have coffee after dinner. 5. We have a lot of work to do. 6. Kate has a good library at home. 7. She has a new textbook on Physics. 8. This year we have much snow in winter. 9. They have dinner in the canteen. 10. His relatives have a big garden in the village. 11. I have enough time to do my homework.

Exercise 19. *Answer the following questions.*

1. Have you got a sister or a brother? 2. How many brothers have you? 3. Have you any relatives in Canada? 4. Have you got a new text book? 5. Have you got a good mark? 6. Has your brother a bicycle? 7. At what time do you have breakfast /dinner/supper? 8. Do you have friends in your group? 9. How many times a day do you have meals? 10. Does your friend have a walk before going to bed? 11. At what time do your classes begin? 12. Do you have coffee or tea for breakfast? 13. Do you have any news for me? 14. When do you have an English lesson?

Exercise 20. *Translate from Ukrainian into English.*

1. Я вивчаю англійську мову. Студенти нашої групи також вивчають англійську мову. 2. Де ти живеш? Де живе твій товариш? Де живуть твої батьки? 3. Я не працюю. Я студент Української Медичної Стоматологічної Академії. 4. Моя сестра також студентка. Вона вивчає українську мову. 5. Мій брат працює в лікарні. Він лікар. 6. Де працюють твої батьки. 7. Ви читаете англійські книжки? 8. Що ви робите після уроків? 9. Коли ви граєте в шахи? 10. Мені не подобається ця книжка. 11. Її батько викладає анатомію в нашій Академії. 12. О котрій годині ви встаєте? 13. О котрій годині ви лягаєте спати? 14. У суботу ми ходимо в кіно. 15. Хто живе в цьому будинку? 16. Хто викладає англійську мову у вашій групі? 17. Ця дівчина співає дуже добре. 18. Хто допомагає тобі вивчати Анатомію? 19. Мій батько тракторист. 20. Наш учитель зараз у Києві. Твоя сестра вдома. 21. Петро не хворий. Де твій брат? Його нема в кімнаті. 22. Ми в школі.



23. Тракторі в полі. 24. Хто твоя сестра? Вона лікар. 25. Де твоя ручка? Вона в портфелі. 26. Де географічна карта? Вона загубилась. Але вчора я її бачив в тебе. Нічого дивного, я загубила її саме вчора. 27. Чому тут нема Тараса? Він захворів і лежить вдома. 28. Ти граєш на піаніно? Ні, але я б хотіла грати. 29. Ти підеш завтра в кіно? Ні, бо я буду робити домашнє завдання. 30. Ви обідаєте вдома чи в їдальні?

### The Past Indefinite Tense

Ex. 1. *Make 4 - 5 sentences from each table and translate them.*

I began to study Anatomy	yesterday
He returned home	last year
She finished school	last summer
We graduated from the institute	in 1981
You entered the college	three days ago
They read this book	on Monday

Did	I	go to the institute	yesterday
	he	work in the laboratory	last Monday
	she	complain of a headache	last summer
	we	receive a telegramme	on Friday
	you	go to the hospital	
	they	operate	

I he she you we they	did not (didn't)	play volley-ball	yesterday
		go to the therapeutic department	last year
		discharge the patient from the hospital	last week
		help the patient on	Sunday
		fill in his case history	

Ex. 2. *Make the following sentences negative and interrogative. Translate the sentences.*

1. The doctor repeated his question. 2. The doctor caught cold himself. 3. They achieved good progress in the investigation.

4. She decided to call in a doctor. 5. The doctor was responsible for the results of the operation. 6. The nurse allowed you to go out.

Ex. 3. Change the following into the Past Indefinite. Translate the sentences. 1. Her mother works at the hospital. 2. I often see them in the laboratory room. 3. Do the students of medicine study Mathematics? 4. His father teaches Biochemistry at the medical institute. 5. I get up, wash myself, dress, have my breakfast and go to the institute. 6. Does the doctor speak English well? 7. All the students understand the law delivered by the professor.

Ex. 4. *Make up five sentences from each table. Translate the sentences.*

When	did	I	begin to study Biology?
Where		he	learn the Latin terms?
What		she	wash hands before the operation?
		you	write down a lecture?
		we	do after classes?
		they	at the practical classes?

Who	translated the text?
Which of them	worked at the laboratory?
Whose (son)	complained of a running nose?
(daughter)	visited the doctor this month?
(patient)	came the first?

Exercise 5. *Form Past Indefinite of the following verbs.*

to look, to love, to dress, to cry, to become, to enjoy, to begin, to buy, to come, to clear, to do, to eat, to fall, to cook, to compel, to feel, to get, to forget, to go, to have, to keep, to know, to meet, to leave, to make, to see, to sleep, to speak, to take, to teach, to understand, to ask, to find, to form, to write.



Ex. 6. *Make up five sentences from each table.*

I	discussed the novel	last week
He	finished the school	yesterday
She	read the book	in November
We	returned in	1995
You	left Poltava	two days ago
They	came to the hospital	on Monday

Did	I	arrive	on Monday?
	he	go to the country	last year?
	she	play football	last summer?
	we	go to the cinema	two days ago?
	you	work at the hospital	yesterday?
	they	get the book	

I	(didn't)	write a composition	last night
He	did not	go to the theatre	last year
She		live in Moscow	in May
We		play chess	at my house
You		invite them	a week ago
They		make mistakes	

Exercise 7. *Change the following into Past Indefinite.*

1. This young doctor operates himself. 2. My friend doesn't like such films. 3. Do your students read English newspapers at home? 4. Her mother teaches Chemistry at the institute. 5. I don't know your address. 6. He gets up, washes, dresses, has breakfast and goes to school. 7. Does the doctor on duty speak English? 8. I don't understand the rule. 9. My friend doesn't like such books. 10. In summer we have practical training at the hospital. 11. This doctor works at the therapeutic department.

Exercise 8. *Make the following sentences interrogative and negative.*

1. The doctor allowed you to walk. 2. Our team won the match. 3. The clock on the wall struck ten. 4. The tourists reached the river station before dark. 5. The woman wrote a letter to her friend abroad. 6. Boys like to play football in summer. 7. We slept

in the open air after a long walk. 8. The laboratory worker turned off the gas. 9. The girl caught cold in the early winter. 10. After dinner we played chess. 11. Students put some questions to professor Kovalyov.

Exercise 9. Ask questions as in the model.

Model: Ask me if I went to bed at ten. - Did you go to bed at ten?

1/ if I played chess at night; 2/ if I slept in the open air; 3/ if my friend called in the doctor; 4/ whether my brother spent his holidays in the Crimea; 5/ if I took a taxi in the morning; 6/ if I enjoyed the party at Baranov's; 7/ whether I saw Valentine yesterday.

Exercise 10. Make up five sentences from each table.

When Where	did	I he she we you they	begin to learn English? work with him? meet your friends? buy a new book? see a doctor? enter the Academy?
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Who Whose friend Which of your students	lived here two years ago? came to the class first? saw the teacher yesterday? worked at this hospital? translated from English?
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What	did	I he she we you they	buy come read write study eat	there? last day? in the morning? in the afternoon? at the Academy? before dinner?
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Exercise 11 Put questions to the underlined words.

1. My wife saw you in Moscow. 2. She lighted me the way because it was foggy in the forest. 3. They started to work just after dinner.



4. His sister grew beautiful flowers in the country. 5. Last year I went to Kyiv every month. 6. The students understood the grammar rule very well. 7. Oksana saw them at the Academy.

Exercise 12. *Answer the following questions.*

1. How do you spend your winter holidays? 2. Where do you usually spend your summer holidays? 3. At what time do you usually get up? 4. At what time do you have breakfast? 5. What did you have for dinner yesterday? 6. When did you go to the theatre last? 7. How did you come here? 8. What language did you study at school? 9. Why don't you learn the new words every day? 10. Where do you usually do your homework?

Exercise 13. *Put the predicate into Past Indefinite.*

1. I am a student. 2. We are at the institute. 3. His brother is a doctor. 4. My elder sister is a therapist. 5. We are never tired at the English lessons. 6. All the students are at the lecture. 7. Is doctor Petrenko in the hospital? 8. Are you ready for the lesson? 9. Are all the students present at the lecture? 10. Are you unwell?

Exercise 14. Make up five sentences from each table.

I	was	busy	in the morning?
He	was not	here	last month?
She	were	there	at 12 o'clock?
We	were not	in Kyiv	yesterday?
You		at home	on Monday?
They		at the Academy	at that time?

When	was	I	in the country?
Where	were	you	at the Academy?
How		he	in the forest?
Why		she	in the library?
		we	here?
		they	there?
			in Kyiv?
			at 12 o'clock?
			on Friday?
			in June?
			in the afternoon?
			in the 1995?

## The Future Indefinite Tense

Ex. 1. *Change the following into the Future Indefinite Tense.*

*Translate the sentences.*

1. The students have exams twice a year. 2. I spend my vacations at home. 3. The doctor leave the hospital at 2 p.m. 4. The patient agrees with the doctor. 5. We make the analyses at the laboratory. 6. Her husband works at the surgical department. 7. He buys this medicine to treat his father.

Ex. 2. *Make up five sentences from each table. Translate the sentences.*

I	'll	call in a doctor	tomorrow
He	shall	start	in the morning
She	shall not	palpate	next week
We	remember it	on Monday	
You	will	cure her	next year
They	will not (won't)	do him	harm
		achieve good knowledge	
		decide to do it	
		fix the rib	
		be responsible for it	

Will	I	go to the surgery	tomorrow
	he	leave for Moscow	this evening
Shall	she	be discharged from the hospital	
	we	analyse his findings	next year
	you	finish her experiment	
	they		

When	will	I	wait for me?
		he	make a diagnosis?
Where	shall	she	have dinner?
		we	start his treatment?
		you	begin to operate on?
		they	



What	will shall	I he she we you they	do tomorrow? discuss at the morning round? study at home? read in the library? finish tomorrow morning? find out?
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Ex. 3. *Make the following interrogative and negative. Translate the sentences.*

1. The meeting will begin at 8:30.
2. They will be at the polyclinic in the morning.
3. She will cook breakfast for us.
4. She will be seven next year.
5. We shall do many experiments tomorrow.
6. I shall see you tomorrow morning.
7. I'll buy a camera next month.
8. They'll tell us about it.

Exercise 4. *Change the following into Future Indefinite.*

1. The students have lectures twice a week.
2. I go to the library in the afternoon.
3. Our dean went to Kyiv yesterday.
4. I agree with you.
5. The Academy year begins on the first of September.
6. I do my homework in the evening.
7. My sister is a doctor.
8. I saw him at the Academy.
9. I never sleep in the open air.
10. Her husband works at the institute.

Exercise 5. *Make up five sentences from each table.*

I	'll	send a telegramme	tomorrow.
He	shall	clean the table	in the afternoon
She	will	work in the lab	some other day
We	shall not	go to the cinema	on Wednesday
You	will not	do it	in 1999.
They	shan't	write the dictation	in 2000.
	won't	graduate	in 2001.

When	will	I	leave for London	tomorrow?
Where	shall	he	study English	yesterday?
At what time		she	go shopping	next year?
		we	watch TV	
		you	have dinner	
		they	meet your friend	

Exercise 6. *Make the following sentences negative and interrogative.*

1. The lecture will begin at three. 2. They will be in Kyiv the day after tomorrow. 3. She will cook dinner for me. 4. We shall start in the morning. 5. The students will be here in a minute. 6. The train will start in ten minutes. 7. We shall write a dictation next lesson. 8. I shall meet you at the station. 9. My friend will buy a car next month. 10. They'll speak about this film.

Примітка. Речення реальної мови перекладаються на українську мову умовним реченням з дієсловом - присудком у дійсному способі, підрядні речення виражають реальні, здійснені припущення.

If she «comes» at five,                      Якщо вона прийде оп'ятій,  
he will be at home.                              він буде вдома.

Такі речення найчастіше стосуються майбутнього часу. Особливістю їх є те, що в підрядному реченні замість форм майбутнього часу вживається відповідна форма теперішнього часу.

Exercise 7. *Replace the infinitives in brackets by Future Indefinite or Present Indefinite. Translate the sentences.*

1. When the academic year (to be) over, the students will go to the practical work at the hospitals.
2. Peter will look after his little sister till their mother (to come) back.
3. We (to go) to the cinema the day after tomorrow if we (to get) tickets.
4. As soon as the professor (to enter) the classroom the students (to stand up).
5. Wait for me till I (to return).
6. She (not to go) to the institute tomorrow, if her temperature (to be high).
7. We'll go to the Caucasus after we (to be discharged) from the hospital.

Exercise 8. *Put questions to the underlined words.*

1. We'll get up at seven tomorrow.
2. Our new teacher will come to see us today.
3. They will leave for Kyiv in some minutes.
4. My parents will be at home in the evening.
5. Peter won't go to the



theatre because he is very busy. 6. We'll play tennis every Tuesday. 7. The new institute will train teachers

Exercise 9. *Make up five sentences from each table.*

I	will	stay at home	if	she comes
He	shall	go to the station	when	he leaves
She	won't	clean the room	after	the weather is fine
We	shan't	watch TV	till	the lesson is over
You		begin to work	until	the bell rings
They			before	10 o'clock

If	she comes	I	will	start it
As soon	we get home	he	shall	do it
as	he passes his exam	she	will not	go there
When	professor allows	we	shall not	let him know
	he lives	you		call you
		they		invite him

Exercise 10. *Answer the following questions.*

1. What will you do tomorrow morning? 2. At what time will you get up tomorrow morning? 3. At what time will you come home after classes? 4. When will you do this work? 5. What will you do in the afternoon? 6. Where will you go for the week-end? 7. At what time will you go to bed tonight? 8. How old will you be in five years? 9. When will you graduate from the institute? 10. Will you try it again? 11. When will you go to the theatre with me? 12. Will you be free tomorrow? 13. Shall I wake you up tomorrow? 14. Where will you work after graduation? 15. Will he come to see you tomorrow?

Exercise 11. *Replace the infinitives in brackets by the necessary forms in Future Indefinite or in Present Indefinite.*

1. Peter will look after his sister till his mother (to come) back home. 2. My friend and I (to go) to the cinema tomorrow if we (to be not busy). 3. Wait for me till I (to come back). 4. As soon as the professor (to enter) the classroom, the students (to stand up). 5. We (not to go) to the country, if the weather (to be bad).

6. Don't go for a walk before the rain (to stop). 7. We'll go to Odessa after we (to pass) all our exams.

Exercise 12. *Combine the given sentences as in the model.*

Model: He will buy tickets. We shall go to the cinema.

If he buys tickets, we shall go to the cinema.

1. I'll see him. I'll invite him to the congress.
2. Oksana will come to see me. We'll revise the grammar rules.
3. Peter will not allow me to go with him. I'll stay at home.
4. You won't wake me up. I'll miss the train.
5. We'll take a taxi. We'll get in time for the train.
6. He will fall ill. You'll call a doctor.
7. They won't come in time. I'll go without them.
8. It will rain tomorrow. The students will not go on excursion.
9. I'll see you. I will invite you to the country for the week-end.
10. I'll go to Kyiv. I'll have a day off this week.

Exercise 13. *Translate into English.*

1. Я вивчаю англійську та німецьку мову.
2. Я не працюю на заводі, я навчаюсь в Академії.
3. Мій брат працює в лікарні.
4. Ви читаете англійські книжки?
5. Де працюють твої батьки?
6. Мені не подобається ця книжка.
7. Її батько викладає англійську мову в школі.
8. Чому ти пропускаєш уроки?
9. О котрій годині ви встаєте?
10. У суботу ми групою ходимо в театр або в кіно.
11. Як вчиться Петро?
12. Хіба ви не вивчаєте математику?
13. Як студенти проводять літні канікули?
14. Наш професор зараз у Києві на конгресі.
15. Оксана вдома?
16. Хто твоя сестра? Вона лікар.
17. Де твої книжки?
18. Газети у нас на столі.
19. Чому нема Петра? Він в Академії.
20. У мене є фотоапарат.
21. У нас є авторучки.
22. У кого є цей підручник?
23. У тебе брат у Києві?
24. Що у тебе в кишені?
25. Ви обідаєте вдома чи в Академії?
26. Діти допомагали батькам.
27. Що ви робили в неділю?
28. Де ти був учора ввечері?
29. Що ви робили на уроці англійської мови? - Ми читали, перекладали новий текст, відповідали на запитання вчителя і порекладали речення з української мови на англійську.
30. Коли ви почали вивчати англійську мову? - Ми почали вивчати англійську мову у вересні.
31. Скільки сторінок ви



прочитали минулоготижня? 32. О котрій годині ти звичайно встаєш? 33. Коли твої друзі приходили до тебе? Хто прих- одив до тебе учора? 34. Вчора я не писав листа. 35. Які іноземні мови ви вивчаєте? 36. У школі я вивчав німецьку, але знаю її погано. 37. Завтра студенти підуть до музею. 38. Ви підете на концерт ввечері? 39. Коли почнеться лекція? 40. Через місяць ми поїдемо до Києва. 41. О котрій годині ти встанеш завтра? 42. Наступного тижня ми вивчатимемо новий текст. 43. У середу її не буде в Академії. 44. Через два тижні йому буде двадцять років. 45. Якщо погода буде хороша, ми підемо на екскурсію. 46. Я чекати- му, поки ти складеш екзамен. 47. Я піду до неї, як тільки вона подзвонить нам. 48. Після того як вона закінчить Академію, вона стане стоматологом. 49. Коли у вас буде сесія?

**BASIC COURSE**  
**Lesson One**  
(The first lesson)

the verbs to be, to have;  
Indefinite Tenses.

**About my Family and Myself.**

First of all let me introduce myself. My name is Peter Koval. I am seventeen years old. I am a student of the first year. My family lives in Kyiv in one of the residential areas. My parents have two more children besides me. Thus I have an elder sister Dasha and a younger brother Mykola. My brother is a schoolboy. He is thirteen. My sister is ten years older. So she is twentythree years old. She is a doctor by profession. She is married. Her husband is an engineer. They are four in the family. She has two children - a son and a daughter. They are twins. They are lovely little kids with golden hair and blue eyes.

My parents are not old at all. Daddy is forty four and Mum is two years his junior. My grandparents are already pensioners, but they are still full of life and energy. I have many relatives - aunts, uncles, cousins in Ukraine.

My father is an engineer in computers and my mother is a teacher of English at the Institute. They like their work very much.

I am fond of reading books on Biology. I go in for sports. I like to play football (soccer), basketball and tennis.

This year I finished my school. Actually I studied well and made some progress in all subjects. I was particularly interested in biology, chemistry and languages. So I entered the Medical Academy.

Active words and word combinations.

a family, to be born in, to work as a teacher (as an engineer, as a doctor, etc.), he is five years younger (elder) than I am;

to attend school (classes), to consist of, to show great interest in something, to be one's hobby, to become a musician (physi-



cist, a fitter, etc.);

a name, a surname, a housewife, a mother, a sister, a father.

Ex. 1. *Answer the following questions.*

1. What is your name?
2. How old are you?
3. Where does your family live?
4. Is your family large?
5. What is your sister by profession?
6. Is she married?
7. What is her husband?
8. How many children have they?
9. Are your parents old?
10. Do you have relatives in Ukraine?
11. What do you like?
12. Are you a sportsman?
13. Did you study well at school?
14. What were you particularly interested in school?
15. What did you decide to enter after school?
16. What doctor are you going to be?

### **Grammar exercises.**

Ex. 2. *Turn the following sentences into negative and interrogative.*

1. My family is large.
2. My parents have three children.
3. My brother is a schoolboy.
4. I have got a sister and a brother.
5. They are lovely little twins.
6. My mother is a teacher of English.
7. Masha and Petro are particularly interested in Biology.

Ex. 3. *Replace the word «often» by the words given in brackets.*

1. I am often at the hospital after classes.
2. He was often 2 or 3 hours to work in the library.
3. I often take part in the football games (always, usually).

Ex. 4. *Answer the following questions.*

1. What is your name?
2. How old are you?

3. What year student are you?
4. Have your parents other children?
5. Is your mother a doctor or a teacher?
6. How old are your parents?
7. Is your sister married?
8. Have you any relatives in Poltava?
9. What relatives have you in Kyiv?
10. What is your father?
11. What is your mother?
12. What is your brother (sister, cousin, uncle)?
13. Are you fond of English (Biology, Chemistry, Physics)?
14. Why are you fond of Biology (Anatomy, Histology)?
15. Are you fond of sports?
16. What kind sports are you fond of?
17. Are you interested in English (Latin, History of Ukraine, History of Medicine)?

Ex. 5. *Put questions to the underlined words.*

1. I am a first year student. 2. My parents have two more children besides me. 3. My sister is a doctor. 4. They are four in the family. 5. My grandparents are already pensioners. 6. I am fond of reading books on Biology. 7. She is interested in many things.

Ex. 6. *Translate from Ukrainian into English paying attention to the forms of the verbs «to be», «to have».*

1. Як вас звати?
2. Я маю велику сім'ю - п'ять чоловік.
3. Мої батьки не молоді.
4. Куди ви йдете? - Я йду до бібліотеки.
5. Відкрийте книгу, знайдіть урок номер один.
6. Що ви зараз робите? - Я читаю новий текст «About my family».
7. Ми у групі любляємо читати англійською.
8. Хто ваш батько? Він - інженер.
9. Ви любляєте спорт? - Так, я люблю грати у футбол (теніс, волейбол, баскетбол, шахи).
10. Якими предметами ви цікавитесь? - Мене цікавлять анатомія і гістологія. Вони дуже важливі для майбутнього врача-стоматолога.



Ex. 7. Compose as many as possible sentences using the table.

I		a student
You		a teacher
He		a doctor
She		a dentist
It		a brother
Me		an aunt
They	to be	a grandpa
My friend		a grandma
These student	to have	a biology lecture
My sister		a laboratory work
My uncle		a chess competition
		my classmates
		their coach

Ex. 8. Fill the blanks with the prepositions when necessary.

1. We live ... Poltava. 2. Im a student ... Ukrainian Medical Stomatological Academy. 3. I usually go ... the Academy ... the morning. 4. They are lovely kids ... golden hair. 5. My grandparents are still full ... life. 6. I go... ... sports. 7. I am fond ... sports. 8. I like toplay... tennis. 9. He is interested ... Biology. 10. I make progress ... all subjects. 11. ... Mondaywe have a lecture toprac- tical classes. 12. ... summer we have holidays. 13. Please come .. the blackboard. 14. Take your books ... ... your bags. 15. Put a vase ... flowers ... the table. 16. ... lessons I gohome. 17. We read,write,do exercises ... our lessons. 18. I like to speak ... the English language. 19. Please come ... . 20. Please go ... . 21. I work ... city hospital №1.

Ex. 9. Fill the blanks with the articles.

1. Mysister is ... student. 2. Her friends are ... students too. 3. I live in ... Poltava. 4. We learn ... English. 5. I am fond of ... English language. 6. The walls in ... classroom are white. 7. Please sit down at ... tables. 8. We usually do... lot of exercis- es in class. 9. I have ... dictation today. 10. Write the new words on ... blackboard. 11. I do myexercises at ... home,too.

Ex. 10. *Compose short situations using the given words and word combinations.*

1. to live, in the centre, to go, to be, to have, the Academy, the office, to meet friends.
2. to have one's English (Biology, Anatomy ...) lessons, in the morning, in the evening, to do exercises, to speak Ukrainian, to have a test (dictation).
3. every morning, to have breakfast, after it, to go on foot, to switch on the radio, to listen to the music, to be in a hurry.

Ex. 11. *Make a composition about your family in a written form.*

**Additional vocabulary to the topic «My family».**

- to work as a teacher - працювати вчителем
- he is two years younger than I am - він на два роки молодший за мене
- to show great interest in something - виявляти великий інтерес до чогось
- to be one's hobby - бути чийось захопленням
- a name - ім'я
- a surname - прізвище
- a housewife - домогосподарка
- a husband - чоловік
- a wife - дружина
- to be married - одружитись
- a nephew - племінник
- a niece - племінниця
- to be retired on pension - іти на пенсію
- to be on a retire - бути на пенсії

**Professions.**

- агроном - agronomist
- будівельник - builder
- бухгалтер - accountant
- друкарка - typist
- доярка - milkmaid
- комбайнер - combine-operator
- конструктор - designer
- кравець - tailor



кухар - cook  
 механік - mechanic  
 муляр - bricklayer  
 перукар - barber (for gentlemen) - hairdresser (for ladies)  
 продавець - salesmen, seller, shop-assistant  
 рибалка - fisherman  
 робітник - worker  
 секретарка - secretary  
 службовець - employer  
 слюсар - fitter, locksmith  
 тракторист - tractor-driver  
 учений - scientist  
 фермер - farmer  
 фізик - physicist  
 хімік - chemist

### Exercises for practice

Ex. 1. Make up sentences and give up answers.

What is	his her your	uncle's father's brother's sister's mother's aunt's	name? proffesion? place of birth? hobby?
When	was were	he she you	born?

Ex. 2. Make up sentences.

My father's My mother's My son's My daughter's My friend's	profession place of work hobby	is  are	reading doctor cinema teacher Academy factory firm
--	--------------------------------------	---------------	--

Ex. 3. *Put the questions to have the following answers.*

Yes, I am. I am fond of sports.

No, I am not. I am a student.

My sister is not a doctor.

She is a student.

I am interested in Natural Sciences.

My father is an engineer.

Ex. 4. *Answer the following questions.*

1. What is your name?
2. How old are they?
3. How many are you in the family?
4. What is your favourite occupation?
5. Have you any brothers or sisters?
6. What are your parents?
7. How old are they?
8. Are your grandparents pensioners?

Ex. 5. *Fill in the necessary words.*

1. This is an Academy. There is ... in it. There are also ... in Academy.
2. This is the classroom. There is .. in the classroom. There are also ... in it.
3. There is the language laboratory in the Chair of foreign languages. There are also ... in it.

Ex. 6. *Put questions to the following sentences.*

1. There is a large laboratory in our Academy. (What).
2. There were 20 members in our club last year. (How many).
3. Next year there will be three examinations. (How many)
4. There will be a performance on the 8th of March. (What)
5. There are some interesting texts in this textbook. (What).
6. There was the screen and slide projector in the classroom. (What).
7. There are 10 students in our group. (Where).

Ex. 7. *Answer the following questions. (Work in pairs).*

1. How many hours are there in a day? There are ...
2. How many days are there in a week? (in a month, in a year). There are...



3. How many seasons are there in a year? There are ...
4. What seasons are there in a year? They are ...
5. What are the names of the months?  
J., F., M., A., M., J., J., A., S., O., N., D.

Ex. 8. *Answer the questions. (Work in pairs and remind how to count).*

- a) 1. What do 10 and 12 make? (22).  
2. What do 50 and 75 make? (125).  
3. What do 635 and 747 make? (1382).
- b) 1. How much is 1 from 10? (9).  
2. How much is 20 from 60? (40).  
3. How much is 400 from 700? (300).
- c) 1. What is 2 times 4? (8).  
2. What is 8 times 10? (80).  
3. What is 15 times 10? (150).
- d) 1. How much is 20 divided by 4? (5).  
2. How much is 100 divided by 5? (20).  
3. How much is 225 divided by 15? (15)

### **What is the Time.**

It's six o'clock.  
It's a quarter past six.  
It's half past six.  
At a quarter to seven.  
It's five (minutes) to seven.  
At five minutes past seven.

### **Memorize phrases.**

- By my watch it's five to seven.
  - It's five past seven by my watch.
  - My watch keeps good time. (Мій годинник йде точно).
- in time - вчасно  
from time to time - час від часу  
hard times - тяжкі часи  
next (last) time - наступного (минулого) разу  
three times - тричі

once - одного разу

twice - двічі

### **Doctor Brown's House**

Doctor Brown's house is not large, but it is comfortable and well-planned. It is a small two-storeyed cottage.

In front of the house there is a green lawn and a lot of flowers. Behind it there is a little orchard with a few fruit trees in it. On the ground floor there is a kitchen, a dining-room, a cosy sitting-room and Dr. Brown's study. There are also several rooms upstairs on the first floor: the Browns' bedrooms, Grandmother's room, which is also Benny's nursery, Betty's room and the bathroom.

The furniture is modern and quite new. But Doctor Brown says he must pay a lot of money for the house and the furniture. He must pay the money for many years before he can call the house his own.

### **Additional Vocabulary**

Bed, sofa, chair, table, armchair, desk, bookcase, cupboard, wardrobe, dressing-table, mirror, carpet, lamp, standard-lamp, radio-set, television-set, curtain, refrigerator (frig), vacuum-cleaner, stool.

### **Lesson Two.**

(The Second Lesson).

#### **Part one.**

Text: Stomatological Academy.

Grammar: Indefinite Tenses. Order of words in positive sentences. Negative and interrogative sentences. Types of questions. Some principles of word-building. Modal verbs: can, may, must.

### **The Academy of Dentistry.**

(Stomatological Academy).

(college life; my working day).

My name is Peter. I am a student of the first year. I study at the department of Dentistry. Our college is situated in the cen-



tre of our city not far from our hostel. It takes me 20 minutes to get there. Our classes start at 8:30 a.m. and last till 4:40 p.m. Usually I have 1 lecture and 3 practical classes. During the first year we study many subjects, such as: Anatomy, Histology, Chemistry, Physics, Biology, Latin, English, Ukrainian, History of Medicine, Physical Culture and some others. Anatomy and English are my favourite subjects. They are very important for my future profession and I make good progress in them. I try to make good progress in other subjects too to have good and excellent marks at the tests and examinations.

The academic year is divided into two parts. The first begins on the first of September and lasts till the end of December. The second term begins at the end of January and lasts till the beginning of June. At the end of each term we have credit tests after which the examination session begins. Usually the students have 3-4 examinations. All the students who successfully pass examinations have vacations - two weeks in winter and four weeks in summer.

Our studies are equipped with corresponding teaching materials, facilities and devices, language study, for example, is equipped with a screen for the slides to be projected, tape-recorders, record-players, TV sets, video and some other tables with different grammar and phonetic materials so that we can use them when we do exercises and correct our speaking when we answer.

Every student may borrow books, textbooks, methodical materials, additional scientific literature from the library. Some students like to work in the reading-hall. There are about half a million books and different magazines in our library. They overlap all the sciences and subjects necessary for training of future dentists. Every department (pre-clinical and clinical ones) has its own library which usually contains the present-day literature on the subject, the scientific and methodical works of the staff-professors and young scientists - their colleagues.

Several outstanding scientists work at our college. Their research works are well known not only in this country. Some of them are Doctors of Medicine, some are Masters (Candidates of Sciences). They all are very qualified teachers and I am sure that I'll be trained as a good specialist in my profession.

In our college there are canteens to have dinner and three cafes to have a cup of tea or coffee during the breaks. The prices are not high and nearly all students come there to have a snack and to talk about our student's life.

### Active words and word combinations.

to be situated  
 at 8:30 a.m.  
 at 4:40 p.m.  
 to equip  
 equipment  
 devices  
 facilities  
 grammar tables  
 canteen  
 science  
 scientist  
 colleague  
 vacations  
 tape-recorder  
 record-player  
 dentist  
 present-day  
 to have a snack  
 outstanding specialist  
 to train

### Practice exercises.

Ex. 1. *Make up sentences using the table.*

You He We They My friend	is are was were	junior student senior student first year student
--------------------------------------	--------------------------	--

Ex. 2. *How do you call?*

- the room where students have lessons.
- the room where students have meals.



- the room where students borrow books.
- the room where the students read scientific literature.
- the room where the students deal with chemical materials, plants, animals.

Ex. 3. *Answer the following questions.*

1. What year student are you?
2. Where do you study at?
3. Where is your college situated?
4. How much time does it take you to get to the college in the morning?
5. What subjects do you study during the first year?
6. What is your favourite subject?
7. Do you make any progress in it?
8. What is the academic year divided into?
9. What do you have at the end of each term?
10. What are your studies equipped with?
11. How do the students use the library?
12. How many books are there in the funds of the college library?
13. Are there any other sources for the students to get modern information on the subject?
14. What can you say about the teaching staff of the college?
  - a) What outstanding scientists who work at the Academy do you know?
  - b) What are they well-known in the world of science for?
  - c) How many MDs work at the Academy? Please, name those who teach you this year.
15. Are there any places in the college where students can have breakfast (dinner, lunch, a cup of coffee, an ice-cream).
  - a) Please describe one of them.

Ex. 4. *Turn the following into negative and interrogative.*

1. They often come to me on Sunday.
2. I go to the college every morning.
3. We often meet our professors in the library.
4. I read English newspapers.
5. Librarians always give me book and journals to read.
6. He does exercises at home in a written form.
7. She sometimes takes my books to do the homework.

Ex. 5. *Put the questions to the underlined words.*

1. Peter is in his room now. (1)
2. Oksana often gives her notes to Peter. (2)
3. We study different subjects. (3)
4. The blackboard in our classroom is brown. (2)
5. This is a laboratory room. (1)

Ex. 6. *Answer the following questions using your active vocabulary.*

1. What is your name?
2. Where do you live?
3. Do you live far from your college?
4. Are you a schoolboy (schoolgirl)?
5. What do you do?
6. Do you work?
7. Where do you work?
8. Where do you go every morning?
9. How long does it take you to go there?
10. Do you go anywhere in the evening?
11. What subjects do you learn?
12. What languages do you learn?
13. What do you usually do during the lesson of English?
14. Do you do many exercises in class?
15. Do you do many exercises at home or not?
16. Do you sometimes have dictations?
17. What language do you speak to your teacher?
18. Where do you go after classes?
19. Do you have friends in your group?
20. What kinds of books do you like to read (poetry, novels, adventures, humour, fiction, etc.).
21. Do you often speak English before and after classes (to your relatives, to your friends).

Ex. 7. *Put questions to the underlined words.*

1. We usually have one English lesson in the morning. (in the afternoon). (3)
2. My friend works at a hospital. (2).
3. Our teacher writes a lot of sentences and new words on the



black-board. (2).

4. After classes many students go to the canteen. (2)

5. We read, write, do exercises, speak and translate at our lessons (1)

Ex. 8. *Using the table make as many positive and negative sentences as you can. Do it in a written form.*

I		give		me
You	don't	do		you
He	doesn't	speak to		him
She		copy out	sometimes	her
It		work	seldom	it
We		go	often	us
They		open	usually	them
My friend		close	every morning	to me
Our teacher		take	every lesson	to you
His sister		get	every day	to him
Her brother		come	from time to time	to her
Their children		meet	always	yo it
That boy		learn		to us
These girls		send		there
This man				here
Those ladies				

Examples:

1. I often send cards to my friend.
2. My friend doesn't give me books. My friend doesn't give books to me.
3. This man works here.

Ex. 9. *Fill in the blanks with preposition where necessary.*

1. What do you usually do ... home ... the evening.
2. She works ... a hospital.
3. Do you speak ... English in class?
4. What language do you speak ... your teacher ... the lesson?
5. Where is your book? It is ... the floor ... the table.
6. I write ... the blackboard ... a piece of chalk.
7. Come ... , please. You may take your place.

8. Please, go ... .You make much noise.
9. Look ... the the picture, please. What do you see ... it?
10. What language do you speak ... classes?
11. Our classes last ... 8:30a.m. ... 4:40p.m.
12. ... Monday we have four lessons.
13. ... summer we have no lessons.
14. I get ... ... 7 o'clock in the morning.
15. ... June we have examinations.

Ex. 10. *Fill in the blanks with the articles.*

My friend's brother is ... student. ... students of his group are ... friends. They live in Kyiv. Their group learns ... English language. ... English is their favourite subject. Their English study is not large but comfortable. ... walls in - 100 - it are light green . Every day ... students come into ... classroom and take ... places. They do ... lot of exercises in class and at ... home. Some of them write new words on ... blackboard.

Ex. 11. *Translate into English.*

1. Я студент першого курсу. 2. Я навчаюсь на стоматологічному факультеті. 3. Заняття починаються о 8:30 і закінчуються о 16:40. 4. Звичайно у нас одна лекція і три практичних заняття. 5. На першому курсі ми вивчаємо: анатомію, біологію ... 6. Мій улюблений предмет ... . 7. Я намагаюся робити успіхи з багатьох предметів. 8. Академічний рік складається з двох семестрів, двох сесій та канікул після кожної сесії. 9. Кабінет англійської мови добре обладнаний. 10. У ньому є екран для перегляду слайдів, магнітофон, програвач, кілька таблиць по фонетиці і граматиці. 11. У академії є велика бібліотека з читальним залом. 12. У бібліотеці багато наукової, учбової і художньої літератури. 13. Кожний студент може брати книги для занять. 14. Є додаткова література з різних предметів, а також наукові журнали на українській, російській та англійській мовах. 15. Більше 50 докторів наук і біля 200 кандидатів наук працюють в академії. 16. Дехто з них - добре відомі вчені. 17. В академії є їдальня, двоє кафе і кілька барів. 18. Кожний студент може випити чашку кофе, з'їсти бутерброд або морозиво, поговорити з товаришами про студентське життя. 19. Я знаю, що я повинен постійно працювати, щоб стати вправним спеціалістом.



Ex. 12. *Compose short situations using the words and word combinations given below.*

1. In the morning, to get up, to live, not far from, a cup of coffee, to do the morning exercises, to listen to the radio, to be in a hurry, to get by trolleybus.

2. In class, every day, to meet friends, to come into the class, to take one's places, to speak English (Ukrainian) to, to write on the black-board, to make notes of the lecture, to have tests and dictations, to get marks, to put questions.

Ex. 13. *Ask you friend in English and get his or her answers (to work in pairs).*

- як його звати, де він живе, чим займається, де навчається, які предмети вивчає, які предмети складні, чи багато він читає, пише на уроках, чим ще студенти займаються на уроках англійської мови, чи часто він розмовляє по-англійськи на уроках, де бере книжки, де обідає, чи любить працювати у читальному залі.

Ex. 14. *Speak about yourself, about your college and your classes. Use the vocabulary.*

Ex. 15. *Read and then learn the dialogue (to work in pairs).*

P: Which subjects do you like most of all?

A: My favorite subjects are Anatomy and English.

P: Do you spend much time on them?

A: Yes, I do. To make a good progress in these and other subjects I must work hard on them. Usually I work in the library. But to learn English I listen to the tape recorder at home, and do many exercises. Sometimes I do English with my friend.

P: What subjects are taught at your department?

A: We are taught Anatomy, History, Physics, Chemistry and others.

P: Are they important for the future dentist?

A: Of course they are.

P: What foreign languages are taught at the college?

A: English, French and German. The first year students also learn the Latin language. It is very important because nearly all scientific terms are in Latin.

P: Do you go in for sports?

A: Yes, I do. I am fond of basketball. I am a member of our department's team. We take part in the competitions every year. But, it's sad, we are not the champions yet.

P: Please, take me sometimes to your college. I want to see it myself.

A: With great pleasure. Let's come tomorrow.

P: Thank you good-bye for tomorrow.

A: Good-bye.

*Exercise 15. Listen to the text. Read and translate it.*

The year is divided into four seasons: spring, summer, autumn and winter. In spring nature awakens from its long winter sleep. The trees are filled with new life, the earth is warmed by the rays of the sun, and the weather gets gradually milder. The fields and the meadows are covered with fresh green grass. The woods and forests are filled with songs of the birds. The sky is blue and cloudless. At night, millions of stars shine in the darkness.

When summer comes the weather gets warmer still and sometimes it's very hot. It's the farmer's busy season - he works in his fields from morning till night. The grass must be cut and the hay must be made, while the dry weather lasts. Sometimes the skies are overcast with heavy clouds. There are storms with thunder, lightning and hail.

Autumn brings with it the harvest-time, when the crops are gathered in and the fruit is picked in the orchards. The days get shorter and the nights longer. The woods turn yellow and brown, leaves begin to fall from the trees, and the ground is covered with them. The skies are grey, and very often it rains.

When winter comes, we're obliged to spend more time indoors



because out of doors it's cold. We may get fog, sleet and frost. Ponds, lakes, rivers and streams are frozen, and the roads are sometimes covered with slippery ice or deep snow. The trees are bare. Bitter north winds have stripped them of all their leaves.

### **Let's Laugh a Little.**

« I will not wash my face », said little Ann. « Oh, you are a bad girl », said the grandmother. « When I was a little girl I always washed my face. » « Yes », said Ann, « and now look at it. »

### **Lesson Three.**

(The third lesson).

continued...

Days, month, seasons

#### **DAYS**

Sunday - неділя  
Monday - понеділок  
Tuesday - вівторок  
Wednesday - середа  
Thursday - четвер  
Friday - п'ятниця  
Saturday - субота

#### **MONTHS**

January - січень  
February - лютий  
March - май  
April - квітень  
May - травень  
June - червень  
July - липень  
August - серпень  
September - вересень  
October - жовтень  
November - листопад  
December - грудень

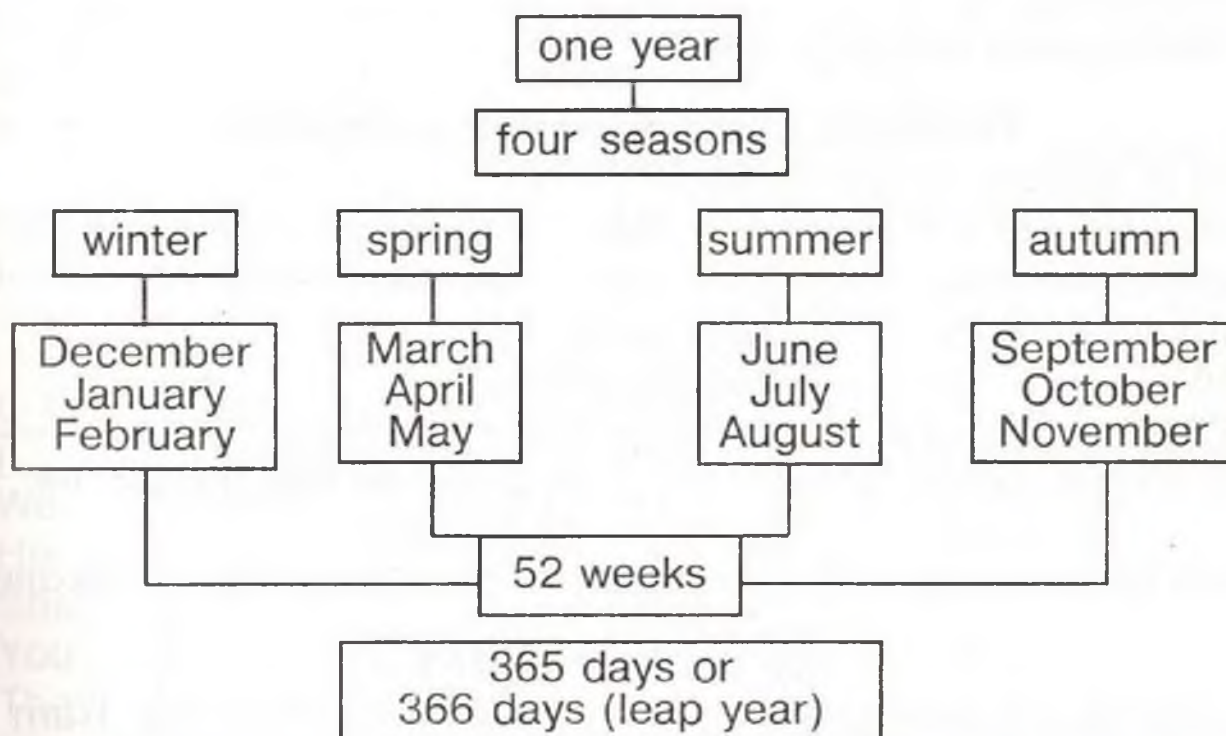
#### **SEASONS**

Spring - весна  
Summer - літо

Autumn - осень

Winter - зима.

Seven days make up a week. Thirty days make up four months. Thirty one days make up seven months. Twenty eight days make up one month. Every fourth of this month makes up twenty nine days.



Sunday Monday Tuesday Wednesday Thursday Friday Saturday

day and night — 24 hours

an hour — 60 minute

a minute — 60 seconds

June 22 the longest day December 22 the shortest day

a) What's the day today? (Sunday,...) b) What's the date today?  
(1st, 2nd, 3rd, 4th,...)

a) Today is ... b) Today is the ...

Exercise 1. Please, learn these short dialogues by heart. (To answer in pairs).

P: Excuse me, could you tell me, what's the time by your watch now? It seems to me, my watch is too fast. A: Well, it's a quarter



past four by my watch. It keeps a good time. Look at the clock on the wall. It shows the time my watch does.

P: Oh, yes, thanks a lot.

\* \* \*

P: Excuse me, it's the ... of ... today.

A: Yes, it is. Yesterday it was ... of ... .

P: And what's the day today?

A: Today is ... .

P: Thank you, I am sure you are right.

### **Proverbs and sayings to memorize.**

Time is money. - Час - гроші.

Times change and we change with them. - Часи змінюються і ми змінюємося разом з ними.

Don't waste time. - Не гайте часу.

Time cures. - Час - це найкращий лікар.

Better late than never. - Краще пізно ніж ніколи.

Lost time is never found again. - Втрачений час ніколи не повернути.

When two Sundays meet together. - На Миколи та й ніколи.

### **MY WORKING DAY.**

Usually on weekdays I get up early in the morning. I am an early bird, by the way. So, I get up at 6:30. I do my morning exercises, clean my teeth with a brush, wash and dress. At about 7:30 I have breakfast which usually consists of a cup of coffee and a sandwich. I don't like to be late for my classes and don't trust our city transport - buses, trolleybuses, etc. So, I go on foot to the college which about 20 minutes walk from my home. Our classes start at 8:30 a.m. and last till 4:40 p.m. The bell rings and the teachers come and the classes begin. Usually we have a lecture and three practical classes every day. A lesson lasts for 90 minutes with a 10 minute break and 30 minute interval between lessons. During 30 minute intervals I have an opportunity to have a snack, to revise the material to be learned and even to discuss the news. We may have meals during the long interval in our cafe.

After classes if I have no extracurriculum activities in our student's club or scientific societies I go home. After dinner, which usually consists of four dishes: soup, meat with vegetables, some-

thing sweet-cakes or pastries and a cup of tea usually with a slice of lemon. As a rule I have a short rest after dinner before doing my homework or watching TV or reading books. I like reading. My favourite genre is fiction.

Sometimes I play chess with my little brother. And at it we discuss his school problems. Next year I am going to have private English lessons to improve my English, especially spoken one.

When it's necessary I stay in the reading hall in our college library to make notes of some modern articles from native or foreign magazines. Twice a week my friends and I like to go in for sports. We play basketball in our college sportshall.

Usually I have no time to go to the theatre, but very seldom the students of our group go there to see a new performance. At about 11 p.m. I go to bed.

### Practical exercises.

Ex. 1. *Make up sentences using the table.*

I We He She You They	have has go goes	three lessons three meals twice to the cinema	a year a month a fortnight a week a day
A lesson An interval A break Holidays A term	last lasts	two months 45 minutes half an hour two weeks an hour	
I You He She We They	is am are	angry glad hungry ready mistaken ill never late 10 minutes late busy sorry	you are late to come again to see you he will come she will be in time to have dinner for the classes to have dinner



Ex. 2. Answer the following questions.

1. At what time does your working day begin?
2. What do you usually do in the morning?
3. How many hours does your working day last?
4. What do you have for breakfast?
5. When do your lessons begin?
6. When are your lessons over?
7. How do you get to the college?
8. How long does it take you to get there?
9. Do you like to go on foot?
10. Do you go in for sports?
11. Do you work in the reading-hall?
12. What do you do at home after classes?
13. What do you like to do at home in the evening?
14. Are you a theatre-goer?

A dialogue to be learned by heart.  
(to work in pairs).

P: Hallo!

A: Hallo!

P: Let's talk about the working days. What do you do in the course of the day?

A: Well, it's really not a simple question for me. Sometimes I do a lot of things during the day, but sometimes I don't.

P: When does your working day start?

A: Usually I go to bed early at about 9 p.m. and prefer to get up early too. So I follow the well-known proverb «Early to bed, early to rise makes the man healthy, wealthy and wise».

P: Oh, yes. I think so too. But sometimes I like to watch night TV and it's not an easy thing to get up early.

A: Don't you know the earlier you start your day the more work you'll do.

P: Do you plan your days or write down what to do during the day?

A: Yes, of course. I have a diary and always plan my work in advance.

P: And what about days-off? Do you make plans of them?

A: Of course, I do. I even think it's my second nature to plan.

P: Thank you very much. Maybe, I'll follow some of your habits.

A: Good luck.

### **Proverbs and sayings.**

Business before pleasure. - Спочатку справа, а потім розвага.

Jack of all trades is master of none. - За все братися - нічого не зробити.

Through hardship to stars. - Через терен до зірок.

### **Additional vocabulary.**

- a hard work - напружена праця
- to enjoy oneself - добре проводити час
- to relax - відпочивати
- in advance - заздалегідь
- to manage - встигати
- to attend - відвідувати
- to have a talk - розмовляти
- to get ready - готуватися
- frankly speaking - щиро кажучи
- to have nothing to do with - не мати нічого спільного з

Congratulations on various occasions (to be learned).

My congratulations to you! - Мої вітання!

Happy New Year! - З новим роком!

Merry Christmas! - З різдвом!

Many happy returns of the day!

Happy birthday! - З днем народження!

May all your dreams come true! - Хай здійсняться всі ваші мрії.

I wish you good luck!

} Бажаємо успіхів!

Good luck (to you)!

My best wishes to you on the ... - Мої найкращі побажання у зв'язку з ...

Happy journey! - Щасливої поїздки!

Have a good time! - Бажаємо гарно провести час.



Ex. 3. *Make as many sentences as you can.*

I You He She We They	enjoyed enjoy enjoys	himself herself themselves ourselves	going to the sports camp last week this winter this holidays week-end
-------------------------------------	----------------------------	---	---

The work The marks Your results This film	have has had	nothing to do with	the behaviour that doctor this script the weather experiment
--	--------------------	--------------------	--

My friends He We They Our students	make make up made	his her our mind their	to congratulate him to go to the seaside to buy a new hat to meet him to come and see her to enter a college
--	-------------------------	---------------------------------	---

New Year's Day Christmas St. Valentine's Day Victory Day Easter Day of knowledge Day of Independence	is celebrated on	...
--	------------------	-----

Ex. 4. *Try to guess the following.*

1. Most people like to have a rest at the (7 letters).
2. Religion festival at the beginning of January (9 letters).
3. April the first is called (5+3 letters).

Ex. 5. *Answer the following questions.*

1. How do you spend your free time?
2. When do you have your days-off?
3. Do you get up early on weekdays?

4. When do you get up on Sunday?
5. What kind of sports do you like?
6. What sports do you go in for?
7. What do you usually do on the week-end?
8. Where do you usually spend your days-off?
9. What holidays are you looking for?
10. When do you congratulate your mother?
11. What holidays do you celebrate in May?
12. How many times a year do you have vacations?
13. Why do students like to spend vacation together?
14. What do you do on winter holidays?
15. What places of interest do you like to see during your summer holidays?
16. Whom do you spend vacations with?
17. When did you visit Kyiv - the capital of this country?
18. What sights impressed you most of all in Kyiv?
19. How are you going to spend your coming vacations?

Ex. 6. *Fill the blanks with the prepositions where necessary.*

A lot ... students go ... college every year. My friends' daughter is ... college now and my son is going ... college next year. I like playing football and sometimes like to play ... tennis ... work ... weekdays and ... the week-end. When did you discuss ... those questions last? We discussed ... them the day ... yesterday. Peter is going to the theatre ... this week. I stayed ... home ... ten yesterday morning.

Ex. 7. *Make up short stories using the following words and word combinations.*

### **A Day Off.**

1. a day off, weather, fine, to make up, to get up, to decide, to stay over the week-end, to go to the country, to come back, to return, late, after supper, not to want, to play a game of chess, at once, to go to bed.

### **A Week-day.**

2. in the afternoon, to decide, to the park, to walk, two hours, to go back, to have dinner, after dinner, to play basketball, to go to the



cinema, to fish.

### **Meeting Friends.**

3. to like, to play chess, often, in the evening, to come to see, to be glad, last night, to have supper, together, to discuss, to go to bed, late.

Ex. 8. *Compose (in a written form) short stories on the topic.*

1. My last day off.
2. How do I usually spend the week-end?
3. Last Sunday's evening.
4. Yesterday (tomorrow) morning.

### **At the canteen**

Ann: I think, it's high time to have a bite. I am hungry.

Bob: So am I. I see you are ready to go down to the canteen. I am just finishing this article. Will you wait a minute, please.

- Yes, hurry up, then.

- Is there anything to your taste on the menu?

- Oh, yes, all kinds of things. Let's have some soup, clear soups, perhaps?

- I don't think I'll have any soup today. I'd like some salad to begin with.

- Will you have mixed salad, chips and mashed potatoes?

- With pleasure. What do you say to a bottle of beer?

- No beer, thanks. I prefer a glass of mineral water or just a cup of tea.

- All right. Tea then. Will you pass me the mustard, please?

- Here you are. As for me, I never take mustard or pepper.

- You don't say so!

- Look! The waitress is already bringing our tea.

- We want neither ham nor sausage, do we?

- No, ham as well as sausage is out of the question. I'd like some fruit, apples or oranges.

- Yes, but you forget about the meeting of our English club. We must leave at once to be in time for the beginning of the discussion.

- Right you are. Come along! Let's pay for the dinner and be off.

### Additional Vocabulary

Meals: breakfast, lunch, dinner, supper, first course, second course, dessert; for the first (second) course.

Dishes: a plate, a glass, a cup, a saucer, a tea-pot, a kettle, a fork, a spoon, a knife.

Ex. 9. *Answer the following questions.*

1. Do you usually have dinner at home? 2. Do you have dinner at home or at the canteen? 3. Where do you usually have dinner? 4. When do you usually have dinner? 5. Why do you have dinner at home? 6. What do you usually have for the first course? (... for the second course? ... for the dessert?) 7. When do you have breakfast? 8. What do you have for breakfast? 9. Do you cook dinner at home? 10. Can you cook? 11. Who cooks meals in your family? 12. Do you like vegetables? 13. What vegetables do you like? 14. What soup do you like best? 15. What kind of salad do you like? 16. What kind of fruit do you buy in summer (in winter) in your city? 17. What do you usually do when you are hungry? 18. What do you do when you are thirsty? 19. What things do you put on the table when you lay the table? 20. How do you lay the table? 21. When do you sit down to table? 22. At what time do you have dinner on Sunday? 23. What do you usually do if you have no time to cook dinner? 24. Do you dine alone? 27. Why don't you have supper? 28. Describe your breakfast. 29. Describe your Sunday breakfast.

Ex. 10. *Fill in prepositions if necessary.*

A. 1. Pass ... me the salt, please. 2. Pass the salt ... me. 3. Give the bread ... me. 4. Show this text ... the teacher. 5. Show ... the teacher this book. 6. He is going to come ... half an hour. 7. Look ... the boy. How dirty he is. 8. I see a new wall-newspaper ... the corridor. 9. The children are playing ... the garden. 10. Are you going ... home? - No, I am going ... the library. 11. They have breakfast ... 8 o'clock ... the morning. 12. I dine ... 3 o'clock ... the afternoon. 13. What do you see ... this picture? 14. Excuse me, may I go ...? 15. Please, come ... . We are just beginning our lesson. 16. The bell is ringing, the students are coming ... the room. The teacher is entering ... the room.



17. The bell is ringing and the students are leaving ... the room.  
18. He is leaving ... Poltava, you know.

B. 1. Will you wait ... me, I'll come ... a minute. 2. Are you ready ... the answer? 3. Have some fruit. ... pleasure. 4. Help yourself ... some fruit, please. 5. I prefer an apple ... ice-cream. 6. The children are ready ... breakfast. They are waiting ... their father. 7. Let's have some herring to begin ... . 8. What do you say ... an ice-cream? 9. As ... me I prefer a piece of cake ... sweets. 10. A waitress is coming ... our table. What shall we order? 11. The pudding is ... your taste, I hope. 12. Going to the river is ... the question, it's too cold to bathe today. 13. Father usually comes ... home ... time. 14. We must pay the waitress ... the dinner. 15. I'm fond ... vegetables and meat.

Ex. 11. *Fill in prepositions if necessary and retell the text.*

Tom and Nick are going ... the canteen to have dinner. It is only half ... one but there are many people ... the canteen already. Some ... they are reading newspapers, others are eating their dinner. The friends always enjoy their meals there.

They go ... a small round table ... the window, take a menu-card ... the next table and begin to read it. Tom does not want to have any soup today. He is going to take some roast beef and vegetables. Nick takes some cabbage soup ... himself, some fried fish and potatoes. He goes over ... the buffet and soon comes back ... some tomato and cucumber salad. Then a waitress comes ... their table and brings them the soup, meat and fish. She also brings some mustard, pepper and salt and puts a knife, fork, spoon ... the table ... front ... each person.

Nick wants to have some ice-cream ... dessert but as it is not ready yet, he takes a piece ... cake and a glass ... tea. Tom orders some fruit as he always prefers fruit ... cakes and ice-cream.

The boys are usually satisfied ... their meals ... this canteen. So they finish their dessert and pay the waitress ... the dinner. Then they put their coats on and go ... the street.

Ex. 12. *Read the dialogue.*

### Dialogue

**Edward:** Hello, Mary!

**Mary:** Hello, Eddy! It is so nice to see you. Come in, please.  
*(Edward comes in, takes off his coat and hangs it on the hook.)*  
**Edward:** Look here, Mary, there's a concert this evening at the club. You are sure to like it. What about going there together?  
**Mary:** I'm afraid I can't. I'm making a new dress. I want to wear it at our party and I haven't finished it yet.  
**Edward:** We haven't been to the club for ages. Besides, it's a pity to stay at home on such a fine day, you know.  
**Mary:** All right, Eddy. But will you help me before we go?  
**Edward:** Certainly. What is it, Mary?  
**Mary:** Something has gone wrong with my electric iron. *(Mary gives the iron to Edward.)* Can you put it right?  
**Edward:** Let me have a look at it. *(Edward examines the iron.)* Well, there's nothing the matter with the iron. I'm sure it's the plug. *(Edward repairs the plug. Mary goes out to change. Then she comes back to Edward.)*  
**Edward:** Here you are.  
**Mary:** How clever of you! Thank you ever so much!  
**Edward:** Are you ready to go now?  
**Mary:** Just a moment! I must switch off the light.  
**Edward:** Hurry up then. I am afraid, we're going to be late.  
**Mary:** I'm ready. Come on. *(Mary and Edward hurry out.)*

### Additional Vocabulary

to be short of time — to be pressed for time; spare time	to look forward to smth. (doing smth.)
on the way home, on the way to... in town, out of town	to look in
to be through with smth.	to listen in
to look through smth. (newspaper, article, text)	to manage to do smth.
	the laundry
	the barber's
	the cleaner's

Ex. 13. Answer the following questions.

1. (At) what time do you get up?
2. Is it light when you get up?
3. You do your morning exercises to music, don't you?
4. What do you do in the bathroom?
5. What do you do with a tooth-brush (a towel, a comb)?
6. Do you take a shower in the morning or



before you go to bed? 7. What do you clean your teeth with? 8. What do you dry yourself on? 9. You do your hair in front of the looking-glass, don't you? 10. At what time do you usually have breakfast? 11. What must you do before you leave for the Institute? 13. What do you clean your flat with? 14. (At) what time do you leave for the Institute? 15. It takes you long to get to the Institute, doesn't it? 16. How long does it take you to get to the Institute? 17. Do you go to the Institute by bus? 18. (At) what time do your classes begin? 19. What do you do when the classes are over? 20. Where do you usually have dinner? 21. Do you prepare for your English lessons at home or do you prefer to work in the Institute reading-room? 22. How long does it take you to do your homework? 23. Do you work at the laboratory every day? 24. When do you usually come home? 25. What do you usually do when you come home? 26. In what way do you help your mother about the house? 27. What do you do with the iron (a vacuum-cleaner, a broom)? 28. What do you usually do in the evening? 29. Do you often go to the theatre or to the cinema? 30. You are fond of skating, aren't you? 31. What do you do when you stay at home in the evening? 32. Do your friends often come to see you? 33. How do you spend the time when your friends come to see you? 35. What do you do when you are going to listen to the latest news? 36. (At) what time do you usually go to bed? 37. Who does the shopping in your family?

Ex. 14. *Fill in prepositions or adverbs wherever necessary.*

1. Ann begins to work ... half past eight. At half past twelve she goes ... to lunch. After lunch she comes back ... her office and works ... four o'clock. At four o'clock she puts ... her hat and coat and does ... home. 2. The students ... our group are never a minute late ... the classes. 3. It doesn't take me long to get ... the Institute. 4. When do you usually get ...? 5. Will you turn ... the light? The children are going ... bed. 6. We have turned ... the tape-recorder and are going to dance ... the music. 7. When I come ... home I take ... my coat and hang it ... the hook. Then I go ... the bathroom, turn ... the tap, wash my hands and dry them ... the towel. 8. What do you press your clothes ...? 9. Have you cleaned ... the table yet? 10. Let's hurry or we'll be late ... the

first lesson. 11. The button has come ... my coat. - Shall I sew it ... for you? 13. Why have you turned ... the radio? - I am going to listen ... the seven o'clock news. 14. Are you going ... bus? 15. Hurry ..., I'm short ... time. 16. Are you through ... your housework?

Ex. 15. Form as many sentences as you can using the following tables.

It takes	me	a quarter of an hour	to get home
	him	half an hour	(to the Institute)
	Mary	an hour	to prepare for the
	us	an hour and a half	English lesson
	you	long	to repair the radio
	them		

How long does it take	Tom	to do the flat?
	Ann	to clean the windows?
	you	to get to the club?
	them	to have dinner?

It doesn't take	me	long	to get home.
	Mary		to cook supper.
	Bob		to learn the dialogue
	us		by heart.
	you		to take a shower.
	them		

### Memory work:

The more we study, the more we know;  
The more we know, the more we forget;  
The more we forget, the less we know;  
The less we know, the less we forget;  
The less we forget, the more we know.  
Why study?

### Let's laugh a little.

**Doctor:** Show me your tongue, little Ann.

**Ann:** No, I shan't. My mother always punishes me when I show my tongue to my sister.



\* \* \*

The well-known singer Enrico Caruso was once driving not far from New York. It so happened that something went wrong with his car and he had to spend some time in the house of a farmer. Soon they became friends and the farmer asked Caruso his name.

When the farmer heard the name, he rose to his feet. «My, I never thought I should see a man like you in my kitchen, sir,» he cried out. «Caruso. The great traveller, Robinson Caruso!»

\* \* \*

«I say, Dad,» said a schoolboy, returning home, «we gave a wonderful performance at school. A lot of parents came and although some of them had seen it before they all had a jolly good time.»

«How do you know?» asked his father.

«Why, they laughed all through the play,» the boy replied.

«And what was the play?» the father asked.

«Hamlet», said the boy.

### **Lesson four.**

(The fourth lesson).

continued...

### **Ukraine.**

Official name - Ukraine.

Status - sovereign state.

Area - 641,000 km<sup>2</sup>

Population - 51.200.000

Capital - Kyiv.

Language - Ukrainian.

Ukraine is the sovereign state. It has its own territory, higher and local bodies of state power (the Supreme Rada and local

Radas in the regions), the government, national emblem, state flag and anthem.

The populations are Ukrainians (73.6%), Russians (21.1%), Jews (1.3%), Byelorussians (0.8%), Moldovians (0.6%), Poles and Bulgarians (0.5% each), and other nationalities. There are 24 administrative regions and the Crimean autonomous republic in Ukraine.

The geographical position of this country is very favourable to the development of its relations with European countries through the world. Ukraine has the common border line with the Russian Federation, Byelorussia, Moldova, Poland, Slovakia, Hungary, Romania. The most territory is flat. In the west the Ukrainian Carpathians and the Crimean mountains in the south make up five per cent of its territory. Ukraine is washed by the Black Sea and the sea of Azov and has very important ports (Odessa, Kerch, Illichovsk and others). The major rivers are the Dnieper, the Dniester, the Bug, the Donets.

Ukraine is rich in industrial raw materials, such as metals, coal, gas, different ores. All these made this country to have metallurgical and heavy industries. Ukraine is a highly developed agricultural country which produces wheat, rye, maize, corn, sunflower and other products of agriculture. Pig and cattle breeding is developed too.

Scientists in Ukraine make a great contribution to the world science. The National Academy of Science includes many outstanding researches in such fields as metallurgy and welding, aircraft, ship-building, atomic power station, gas and oil industry, medicine, dentistry and social science. The research Institute of Electric Welding, the Institute of Cybernetics, Superhard Materials, the Institute of Cardio-surgery and some others are well known in the world.

Ukraine is a young sovereign state. Last years people display a keen interest in its history, culture and heritage. Great attention is paid to the development of the Ukrainian language.

Ukraine sets contacts with many countries throughout the world signing agreements and trade treaties.

Ukraine is one of the founding members of the United Nations, participant of many international organisations.



### Vocabulary to the text.

an anthem - герб  
oil - нафта  
Jews - євреї  
ore - руда  
Poles - поляки  
metallurgical - металургійний  
regions - області  
agricultural - сільськогосподарський  
favourable - сприятливий  
to make contribution - зробити внесок  
flat - рівний  
cybernetics - кібернетика  
mountains - гори  
superhard materials - надтверді матеріали  
to wash - омиватися  
heritage - спадщина

major - головний  
to set contacts - встановлювати контакти  
iron - залізо  
a founding member - член-засновник

### Practice exercises.

Exercise 1. *Answer the following questions.*

1. What is Ukraine?
2. What does it have?
3. What can you say about the population in Ukraine?
4. Is geographical position of Ukraine favourable?
5. What is it favourable to?
6. What countries does Ukraine border on?
7. What else can you say about the territory of Ukraine (rivers, mountains, seas) ?
8. Why is Ukraine an industrial country?
9. What products of agriculture is Ukraine rich in?
10. What can you say about science in Ukraine?
11. Do people display interest in the history of the country? If they do, why?

## Exercise 2. *Make up Sentences.*

Ukraine Kyiv Romania	is situated lies borders on is washed by	the Black Sea in the South Ukraine in Europe
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## Exercise 3. *Put questions to have the following answers.*

1. Ukraine has the common border line with the RF, Byelorussia, Moldova etc.
2. The Supreme Rada is the highest body of the state power in Ukraine.
3. Ukraine is rich in iron, gas, coal, ore and other natural resources.
4. The major rivers in Ukraine are the Dnieper, the Dniester, the Bug, the Donets.

## Exercise 4. *Read the text «Kyiv».*

Kyiv - the capital of Ukraine - is one of the ancient cities of Europe, is situated on picturesque banks of the Dnieper. Its population is about 3 million people. Kyiv is an industrial, cultural and scientific centre of the country with many different enterprises, historical places of interest, museums and theatres, higher educational and research institutions.

Extend report about Kyiv using your knowledge about its places of interest.

## Ex. 5. *Using the following questions make a report about your native town (village).*

1. What is the name of your town?
2. What region is your town situated in?
3. Is your town large or small?
4. For how long do you live in it?
5. What is the population of your town?
6. Is it situated on the bank of the river or not?
7. What places of interest are there in your town? (monuments, museums, theatres, colleges, historical places).
8. Are there any industrial enterprises in your town? If there are any, please name them.
9. What is your native town famous for?



## **Lesson Five.**

(the fifth lesson).

continued

### **GREAT BRITAIN.**

Official name - The United Kingdom of Great Britain and Northern Ireland.

Status - Parliamentary Monarchy.

Area - 244100km<sup>2</sup>.

Population - 56.000.000.

Capital - London.

Languages - English (official), Gaelic (Scotland and Ireland), Welsh (Wales).

Great Britain is situated on islands called the British Isles. It consists of England, Scotland, Wales and Northern Ireland. The climate of Great Britain is normally mild.

Great Britain is a highly-developed industrial country. The branches of industry are ship building, coal-mining, textile, metallurgical industries, electronics and electrical engineering, chemical, aircraft, automobile industries.

The largest cities of Great Britain are: London - the capital of the country with the population of 8 million people, Birmingham, Glasgo, Liverpool, Manchester, Edinburgh and educational centres or university towns Oxford and Cambridge.

Great Britain is divided into 55 administrative counties. This country is a Parliamentary monarchy. The Queen is formally the head of the state, which is really ruled by the Parliament consisting of two Houses: the House of Lords and the House of Commons. The leading party in the Parliament composes the Government. The Prime Minister is the head of the Government.

#### **Active vocabulary.**

Gaelic - гальський

Welsh - уельський, валлійський

isle - острів

mild - м'який  
textile - текстильний  
ship-building - суднобудування  
metallurgical - металургійний  
electronic engineering - електронна техніка  
aircraft - авіаційний  
automobile - автомобільний  
Birmingham  
Liverpool  
Manchester  
Edinburgh  
Oxford  
Cambridge  
county - графство  
monarchy - монархія  
to rule - правити  
the House of Commons - палата громад  
the House of Lords - палата лордів

### **London.**

London is the capital of Great Britain, one of the greatest cities in the world. It stands on two banks of the river Thames. There are some parts of London each of it has its own features. The West End is famous for fashionable shopping, theatres, museums and other entertainment centres. The East End is an industrial part. Westminster is the place for government offices; the City is a financial center; the Soho is well known for Italian, Greek, Chinese, Indian restaurants and a great number of entertainments.

There are some famous parks and gardens: Hyde Park, Covent Garden and others. London's underground system called «the tube» is the oldest. Now it contains 276 stations.

### **Practice Exercises.**

Ex. 1.

- 1) What is the official name of Great Britain?
- 2) What is the capital of Great Britain ?



- 3) Where is Great Britain situated?
- 4) What are the parts of Great Britain?
- 5) Is Great Britain a highly developed country?
- 6) What is Great Britain famous for?
- 7) Who is the head of the state?
- 8) What Body rules the country?
- 9) Do you know major political parties in Great Britain?
- 10) Who is the Prime Minister of Great Britain?
- 11) What is the population of Great Britain and its capital?
- 12) What outstanding figures is Great Britain famous for?
- 13) What can you say about the climate of Great Britain?
- 14) Where is London situated?
- 15) What parts does it consist of?
- 16) Do you know who lives at 10 Downing Street?
- 17) Where do the queen and her family live?
- 18) Do you know the parks of London and what are they famous for?
- 19) What is the name of the clock of the Houses of Parliament?
- 20) How do citizens of London call their underground?

## **THE USA.**

Official name - The United States of America.

Status - Federal Republic.

Area - 9364000 km<sup>2</sup>.

Population - 240.000.000.

Capital - Washington.

Languages - English is the official language, Spanish, Italian, German, Polish, Yiddish, Russian and others are also spoken in the USA.

The USA is one of the largest countries in the world. It consists of 50 states and district of Columbia. The country lies in the central part of the North American continent and is washed by two oceans - the Atlantic and Pacific ones.

There are many big cities in the USA: New York with its population of about 10 million, Chicago, Los Angeles, San Francisco and others.

The USA is a highly developed country with great industrial and agricultural sectors, advanced technologies, world communications, transport of all types and science.

The Government of the USA is composed of three branches — executive, legislative and judicial.

The White House is the place where the President carries out his duties. The Congress - the legislative branch of the government consists of two parts: the Senate and the House of Representatives.

## **WASHINGTON.**

Washington is the capital of the USA. It is a beautiful city and the center of the Government of the State. It is named after the first US president - George Washington.

The industry of the city is not developed because its output are laws and government decisions, moreover it is the residence of the President and the Congress of the United States of America.

Washington is the centre of science and culture. It is well known for many research institutes, five universities, the National Academy and the world famous Library of Congress.

### **Practice exercises.**

Ex. 2.

1. Where is the USA situated?
2. What oceans is it washed by?
3. What is the political structure of the USA?
4. What major parties do you know?
5. What is the territory of the USA?
6. What is the population of the USA?
7. How many states are there in the USA?
8. What is the capital of the USA?
9. What is it famous for?
10. Is the Statue of Liberty situated in Washington?



A Dialogue.  
To be learned by heart  
(to work in pairs).

P: Hallo, Ann.

A: Hi, Peter. I'm glad to see you.

P: As I know you visited your friends in the USA.

A: Yes, I did. It was during my summer holidays.

P: What can you tell me about your impressions? What did you visit?

A: Oh, there are a lot of places to see. Practically every state has something to visit. As a matter of fact I visited half a state with my friend's family. They were touring about the country. We started with New York - the biggest city in the USA. I saw such sights there as Empire State Building, the New York Public Library, the UN headquarters and many other places.

P: Did you enjoy yourself?

A: Oh, yes. Next time I'll tell you more about my impressions. But now, I must go.

P: Thank you, I hope to see you soon.

A: All right. Maybe tomorrow.

*Ex. 3. Read the following text. Retell the text.*

When two Englishmen meet, their first words will be «How do you do?» or «How are you?» And after the reply «Very well, thank you; how are you?» the next remark is almost certain to be about the weather. «It's a lovely morning, isn't it?» or «Isn't it hot today?» and the other person will reply «Yes, it's a wonderful weather we are having. I hope it will keep fine, it seems almost too good to last.»

Or perhaps the day is dull, it is raining a little, the sky is grey, and everyone is wearing a mackintosh or carrying an umbrella. As the cars and buses go along the street, they splash the water and mud on the passers-by.

Gradually it gets darker: a thick fog is spreading over London. The lamps are lit in the streets and in the shops and offices; cars and buses put on their lights and can only crawl along. As one friend bumps into another, he says, «Isn't it a beastly day?» -

«Yes,» replies the other, «you can hardly see a yard in front of you.»

Then comes winter. There has been a good fall of snow and a hard frost. It is just the day for a good country walk; let us have a tramp down the country lanes. The ground is like iron and rings under our feet, the frost sparkles on the branches, and icicles hang from the houses.

It is still freezing hard and the ponds are frozen over. There are crowds of people on them sliding and skating, and here is a merry group of schoolboys having a fight with snowballs. It is very pleasant while the frost lasts; the unpleasant time comes when the thaw begins. A few months have passed and it is a beautiful spring day. The rain fell heavily last night, but now the soft white clouds are floating across the blue sky, and the sun is shining brightly. Raindrops and dew-drops shine on every small green leaf and every blade of young grass.

The farmer has ploughed his fields and the new corn is just beginning to appear above the ground. In a few months autumn and harvest time will come. When the corn has turned ripe and golden the farmer will reap it and put it in his barn.

*Ex. 4. Listen to the text. Observe correct pronunciation of rhythmic groups.*

The weather in England ... can change very quickly ... One day last week ... I went for a walk in the country ... When I started ... early in the morning ... the weather was beautiful ... The sun was shining ... the sky was blue ... and there were no clouds at all ... In the middle of the morning ... a sudden change came ... A cool wind started to blow ... black clouds covered the sun ... and in a very short time ... it started to rain heavily ... There were no houses in sight ... and I had no coat with me ... So I got very wet indeed ... and very cold too ... After about an hour ... I managed to catch a bus ... which took me home ... But when I arrived ... I was shivering and sneezing ... And I've had a cold ever since ... I ought to have taken my coat ... We sometimes say ... that England is the only country ... where you can have four seasons in one day.



### **Let's laugh a little.**

«Your husband is too fond of strong coffee, - said the doctor, - you must not let him have it. He gets too nervous!» «But, doctor, you should see how nervous he is when I give him weak coffee».

\* \* \*

An absent-minded professor was lecturing on Anatomy. He said: «In this parcel I have a dissected frog. I want you to examine it carefully».

The professor opened the parcel and saw that there were two eggs and sandwiches in it. He said: «But I have eaten my lunch. Where is the frog then?»

\* \* \*

Mark Twain, the famous American writer, was travelling in France. Once he was going by train to Dijon. That afternoon he was tired and wanted to sleep. He therefore asked the conductor to wake him up when they came to Dijon. But first he explained that he was a very heavy sleeper. «I'll probably protest loudly when you try to wake me up,» he said to the conductor. «But do not take any notice, just put me off the train anyway.»

Then Mark Twain went to sleep. Later, when he woke up, it was night-time and the train was in Paris already. He realized at once that the conductor had forgotten to wake him up at Dijon. He was very angry. He ran up to the conductor and began to shout at him. «I have never been so angry in all my life,» Mark Twain said.

The conductor looked at him calmly. «You are not half so angry as the American whom I put off the train at Dijon,» he said.

**Lesson Six.**  
(the sixth lesson).  
**The Grammar Lesson.**

- continued

- Continuous Tenses (Active)
- Perfect Tenses (Active)
- Present Participle
- Sequence of Tenses
- IPassive Voice
- Non-Finite Forms of the Verb
- Moods

**The Present Continuous Tense.**

The Present Continuous Tense утворюється за допомогою дієслова to be в Present Indefinite (am, is, are) та дієприкметника теперішнього часу (the present participle) смислового дієслова (із закінченням -ing).

The Present Continuous Tense вживається в момент розмови: What are you doing now? Про тривалість дії у теперішньому часі свідчить наявність таких слів як now, at the moment або контекст.

Дієслова, які виражають почуття, сприймання, розумові процеси (to love, to like, to have, to want, to wish, to hear, to feel, to know, to understand, to remember, to forget, to believe, to appear etc.), як правило, не вживаються у формах Continuous Tenses.

Для вираження майбутньої дії, коли виражається намір здійснити її:

I am going to Kyiv tomorrow.

She is going to buy a new dress.

**The Past Continuous Tense**

утворюється за допомогою дієслова to be в Past Indefinite (was, were) і дієприкметника теперішнього часу (the Present Participle) смислового дієслова (дієслова із закінченням -ing):  
he was writing, they were smiling.



The Past Continuous Tense виражає дію у процесі її виконання. Українською мовою перекладається минулим часом дієслова недоконаного виду, виражає дію, що відбувається в певний час у минулому.

Цей момент може позначатися точним вказанням часу чи відрізка часу: at 5 o'clock, at what time, at noon, from 5 till 7 o'clock, або іншою дією, вираженою дієсловом в Past Indefinite.

They were reading a book at 5 o'clock.

I was reading a paper, when she came.

### The Future Continuous Tense

утворюється за допомогою дієслова to be у Future Indefinite (shall be, will be) та дієприкметника теперішнього часу (the Present Participle) смислового дієслова (із закінченням -ing).  
He will be speaking. I shall be writing.

The Future Continuous Tense виражає дію, що відбудеться у певний момент часу в майбутньому. Цей момент часу може позначатися точним вказанням часу або відрізка часу (at 5 o'clock, at that time, from 5 till 7 o'clock), або іншою майбутньою дією, вираженою дієсловом у Present Continuous в підрядному реченні умови або часу:

I shall be playing chess at 5 o'clock.

She will be working when I come.

to be

verb+ing

What	am	I	ask	now
Where	is	you	work	at the moment
When	are	he	answer	from 5 till 7 o'clock yesterday
How	was	she	go	from 5 till 7 o'clock tomorrow
Why	were	it	do	when you came
...	shall be	we	come	when she comes
	will be	they	read	...

## Practice exercises.

Ex. 1. *Put the following sentences into negative and interrogative.*

1. I was having dinner when you rang me up.
2. His mother was making supper when I came up.
3. Your friends were smoking in the corridor when we saw them.
4. I was hurrying to the canteen when I met you.
5. He'll be waiting for you at 5 in the evening.
6. They will be having dinner at that time.
7. They'll be discussing this problem from 5 till 7 o'clock.
8. I'll be packing my luggage tomorrow morning.

Ex. 2. *Put the following sentences into Future Continuous making the necessary changes.*

1. What are you doing now?
2. You are not packing my things, are you?
3. Are you waiting for my friend Peter?
4. Where are you hurrying to?
5. Are you staying at a hotel?
6. My friend is now having his English.

Ex. 3.

1. Was your friend doing his homework yesterday in the evening?
2. What will you be doing tomorrow at 3 p.m.?
3. What was he doing then?
4. Who were you talking on phone when I called you?
5. What were you talking about when I came?
6. What was your daughter doing when I came to see her?
7. Was he doing his homework or watching TV yesterday at 7 p.m.?
8. What time shall we have meeting tomorrow?
9. At what time will you be taking the exam this month?
10. Where were you hurrying to when she met you?



Ex. 4. Put questions to the underlined words and word combinations.

1. You were waiting for me at 5 o'clock yesterday. (3)
2. They were discussing this problem when we come in. (2)
3. I was watching TV when you come. (2)
4. She was reading a difficult text at the time you rang me up. (3)
5. I'll be taking my relatives out for picnic tomorrow morning. (2)
6. We'll be discussing Petrenko's report at the noon tomorrow. (2)
7. She'll be seeing for students tomorrow afternoon. (2)

## Perfect Tenses.

### The Present Perfect Tense

утворюється за допомогою дієслова to have у Present Indefinite (have, has) і дієприкметника минулого часу (the past participle) смислового дієслова.

I have done. She has written.

The Present Perfect Tense виражає дію, яка відбулася або відбувається у певний період часу, що триває і для мовця важливий результат цієї дії.

I have written a letter. Here it is.

The Present Perfect Tense вживається з такими обставинами часу: today, this week (month), а також з прислівниками неозначеного часу ever, just, often, already, seldom, up to now, recently, since etc.

I have never been to Kyiv.

She has received a letter this week.

### The Past Perfect Tense

утворюється за допомогою дієслова to have у Past indefinite Tense (had) і дієприкметника минулого часу (the past participle) смислового дієслова.

He had bought it. She had come.

The Past Indefinite виражає дію, яка відбулася до певного моменту у минулому. Цей момент може позначатися точним вказанням часу або іншою дією у минулому.

I had bought this book by 5 o'clock.

They had read an article before we came.

## The Future Perfect Tense

утворюється за допомогою дієслова to have у Future Indefinite Tense (shall have, will have) і дієприкметника минулого часу (the past participle) смислового дієслова.

I shall have brought. They will have come.

The Future Perfect Tense виражає дію, яка відбудеться до певного моменту у майбутньому. Цей момент може позначатися точним вказанням часу, або іншого дією у майбутньому.

I shall have finished this work by 5 o'clock tomorrow. They will have translated this text before we came.

What	have	I	done		
Where	has	you	gone	it	
When	had	he	come	that	at 5 o'clock
How	shall	she	bought	work	
What for	will	we	asked	...	when he comes
	Why	they	finished		

## The Future Perfect-in-the-Past Tense

утворюється так само, як і Future Perfect, але замість допоміжних дієслів shall, will вживаються відповідно should, would.

The Future Perfect-in-the-Past вживається замість Future Perfect переважно у підрядних додаткових реченнях, якщо дієслово головного речення виражає минулу дію.

I thought you would have gone by now. (Я думав, що вже не застану вас).

## Perfect Continuous Tenses.

Часи групи Perfect Continuous виражають дію, яка почалася до моменту мовлення (Present Perfect Continuous), або до моменту мовлення у минулому чи майбутньому (Past Perfect Continuous; Future Perfect Continuous Tenses) і триває аж до цього моменту.

## Present Perfect Continuous

утворюється з допоміжного дієслова to be в Present Perfect та дієприкметника теперішнього часу основного дієслова і



вживається для вираження дії, що почалася в минулому і тривала протягом певного періоду, або все ще продовжується в цей момент, або щойно закінчилася.

His brother has been working here for 10 years.

(почав працювати 10 років і працює досі).

### **The Past Perfect Continuous Tense**

утворюється з допоміжного слова to be в Past Perfect та дієприкметника теперішнього часу основного дієслова.

Цей час виражає дію, яка почалася до якогось моменту в минулому, або продовжується в цей момент, або закінчилася безпосередньо перед ним.

I explained that I had been looking for him for the last two hours.

(The Future Perfect Continuous and the Future Perfect Continuous in-the-Past вживаються рідко).

### **Sequence of tenses.**

(Узгодження часів).

Якщо в головному реченні дієслово-присудок виражає минулу дію, а дія підрядного додаткового речення відбувається в той самий період часу, що і дія головного, то і в підрядному реченні Past Indefinite або Past Continuous.

I thought you were his friend. (Я думав, що ти його друг.)

He had not told me where you were going. (Ви не сказали, куди ви йдете.)

Якщо в головному реченні дієслово-присудок виражає минулу дію, а дія підрядного додаткового речення відбулася раніше дії головного, то в підрядному реченні вживається Past Perfect. Перекладається минулим часом.

I thought you had left Kyiv.

(Я думав, що ви залишили Київ.)

In the English language the action expressed by the verb of the subordinate clause usually depends on the action expressed by the verb of the principal clause.

1. If the verb of the principal clause is expressed in one of the present tenses, or in the future tense, the verb of the subordinate clause may be used in any tense is necessary.

She knows that we shall return in time.

They will understand that nothing can help them.

I have learned that they came to town yesterday.

2. If the verb of the principal clause is expressed in one of the past tenses, the verb of the subordinate clause must also be used in one of the past tenses.

To denote an action simultaneous to the action of the subordinate clause the verb of the subordinate clause must be used in the Past Indefinite or Past Continuous.

She said that they had a small cottage in the country.

We knew that they were going to leave Moscow.

Note: The verb **must** does not obey this rule.

They said she must do it at once.

To denote an action preceding the action of the principal clause the verb of the subordinate clause must be used in the Past Perfect Tense.

He said that he had never been to Kyiv.

### Practice exercises.

Ex. 1. *Put the following sentences into negative and interrogative.*

1. I have met her before.
2. They've known the new rule.
3. She has finished her work.
4. The girl has woken him up.
5. I have made this mistake before.
6. He has had a lot of work today.
7. They have already heard about it.

Ex. 2. Put the questions to the underlined words.

1. I have never been to any foreign country. (2)
2. I have already seen this film. (1)
3. My friend has translated this English book into Russian. (4)
4. She has never lived in Poltava. (2)
5. We have sent them two telegrammes lately. (4)

Ex. 3. Answer the following questions using the given words and word combinations.

1. What have you read	(write) this month? a new book. an interesting paper. a foreign magazine.
-----------------------	--



2. What (who) has your	a lot of exercises. many new texts. friend just seen his school-mate his(her) brother. parents. relatives. a teacher.
3. Where have you been (Where has your friend been lately?).	lately? to Kyiv. to the seaside. to the cinema. to the theatre. to the country.

Ex. 4. Answer the following questions.

1. Have you seen an interesting film?
2. Have you had dinner yet?
3. How many interesting articles have you read this month?
4. When are you going to the theatre again?
5. What book have you read?
6. Are you reading it now?
7. What did you see last?
8. How did you like it?
9. When are you going to see it again?
10. Where is your brother? Has he left Kyiv?
11. Where did you have breakfast?
12. Have you ever been to Kyiv?
13. How many times have you been there?
14. When did you go there last?
15. Did you see much of the capital of this country?

Ex. 5. Open the brackets. Put the infinitive into the necessary form.

1. When you (to come) to Kyiv? - A week ago.
2. You (to see) the new film? - Yes.
- How do you (to like) it?
3. You ever (to be) to Kyiv? - I (to go) there last year.
4. I just (to finish) my work and (to read) a book now.
5. You (to do) the translation already? - You only (to begin) it 10 minutes before.
6. You (to finish) your

work yet? May I have a look at it? 7. I just (to have) dinner and (to read) an interesting book now. 8. Have you (to do) the translation yet? 9. He (to see) several interesting films lately. 10. Have you ever (to do) such a difficult work?

Ex. 6. *Finish the sentences according to the example.*

Example:

I knew that — 

she worked
she had worked
she would work

 — at the college.

1. He said that ...
2. I thought that ...
3. Who told you that ...

Ex. 7. *Translate the sentences.*

1. I'll have finished my work by the time you come. 2. The work will have been done by the time you come home. 3. Will you have taken the exams by the end of June. 4. You will change your mind after you have talked to your mother. 5. You have lost a borrowed book in the hall.

Ex. 8. *Finish the following sentences using Present Perfect in the subordinate clauses.*

1. I wonder what you will say when you (to see this musician play) ...
2. I'll give you these magazines after I (to look through) ...
3. She'll join us as soon as she (to finish) ...
4. I'm sure you will change your opinion after ...

Ex. 9. *Fill in the blanks with the prepositions.*

1. I wonder which hostel your sister is staying ... . Why has not she written to tell you? 2. The old man says his wife retired ... fifty five. 3. ... my first visit ... Kyiv I spent many hours sightseeing. 4. What street do you live ... ? 5. Is it a long way ... here? 6. I met ... a friend of mine ... my way ... the college the day before yesterday. She told ... me that she had got a new flat ... a new district ... the suburbs. 7. ... a holiday there are always a lot of people ... the streets and parks of our town. 8. Is your friend still ...



the hospital? No, he isn't. He has been discharged... it a week ago. 9. My teacher is an old man. He still works ... a college. 10. What are you going to do on Sunday?

Ex. 10. *Change from direct into indirect speech.*

1. The doctor said, «Flu is an infection disease». 2. The students said, «We study English». 3. The woman said, «I am a therapist». 4. My friend said, «I'll be at home at seven». 5. Peter said, «I was there with my friends». 6. The girl said, «I have already done my homework». 7. Her mother said, «I don't speak German». 8. The doctor said, «I shall come tomorrow in the afternoon». 9. I said, «I did not see Ann here». 10. The boys said, «We had dinner at school». 11. Peter said, «I did not buy anything here». 12. The student said, «I'm not hurrying at all». 13. The doctor said, «You don't know the origin of the disease». 14. He said, «I did not recognize you». 15. The boy said, «I am doing my homework now». 16. She said, «I saw him at 8:30 a.m.». 17. The student said, «Kyiv is the capital of Ukraine». 18. She said, «My mother works at the institute». 19. He said, «In summer I'll go to the sea-side». 20. They said, «We are fond of this picture».

### The Passive Voice.

The Passive Voice утворюється за допомогою дієслова to be у відповідному часі, особі, числі, дієприкметника минулого часу (the past participle) смислового дієслова.

+ The house was built in 1994.

? Was the house built in 1994?

- The house was not built in 1994. Вживання пасивного стану дієслова to take у різних часових формах.

Tense	Indefinite	Continuous	Perfect
Present	The book is taken.	The book is being taken.	The book has been taken.
Past	The book is taken.	The book was being taken.	The book had been taken.
Future	The book will be taken.	_____	The book will have been taken.
Future in-the-Past	The book would be given.	_____	The book would have been given.

The Active Voice.

The Doctor treats his patients.

The Passive Voice.

The patient is treated by his doctor.

to be + III verb (examined)

Present	Past	Future
am + is examined are	was + examined were	shall be + examined will be

- 1 - The medicine was prescribed last week.
- 2 - The patients were examined twice a week.
- 3 - The patients were examined twice a week.
- 4 - This prescription was made out by doctor Petrov.

Exercise 1. *Make up five sentences from each table. Translate the sentences.*

Furniture Radio sets Tomatoes Medicine	is are	brown made repaired sold taken at the shop	here at the hospital in the morning at the plant at the chemist's
---	-----------	---	---

The theatre the hospital The car(s) The shop	was were	built closed bought repaired	last year at 10p.m. five years ago in summer by the doctor
---	-------------	---------------------------------------	--



Is	the hospital	built	here
Are	the car(s)	written	this week
Was	the shop	brought	next week
Were	the patient	bought	by the end of year
	the medicine	taken in	on Monday
		discharged	in summer
		closed	by the doctor

Exercise 2. *Make the following interrogative and negative. Translate the sentences.*

1. The floor was painted last summer.
2. The polyclinic will be closed at 3 p.m.
3. The sick man was operated on by the surgeon.
4. The room was cleaned by the woman.
5. This textbook was written by the prominent scientist.
6. The article will be translated by the student.
7. The new hospital was built in this town.
8. The medicine should be given to the patient every four hours.
9. The dates of examinations were fixed by the dean.
10. The lecture is delivered by professor Smirnova.
11. Psychology is taught by the dean of the faculty.

Exercise 3. *Change the following into Passive Voice. Translate the sentences.*

Model: The nurse waters the wound every day. The wound is watered by the nurse every day.

1. They published this article in Moscow.
2. We do not discuss such questions at our meeting.
3. The doctor does not discharge the patient from the hospital.
4. The doctor did not show the patient the results of his blood analysis.
5. We shall invite the students to take part in the experiments on animals.
6. The students closed the laboratory late in the evening.
7. They wrote the composition before the bell rang.

8. The scientists fulfilled the plan of their report and changed the way of investigation.

Ex. 4. *Make the following sentences negative and interrogative.*

1. All students are supplied with textbooks.
2. The floor and the walls were painted last month.
3. The drug-store will be closed at 5 p.m.
4. The patient P. is being operated on.
5. The hall is being cleaned now.
6. This book has been translated into Ukrainian by the end of the month.
7. A new school has been built in our district.

Ex. 5. *Turn the following into Passive Voice.*

1. He showed me the museums and monuments of Kyiv.
2. She offered a cup of coffee.
3. The director promised him an interesting work.
4. He showed me the way to the library.
5. They bought two tickets to the cinema.
6. She sent for the doctor.
7. The girl laughed at his mistake.
8. The students of our group attended all the lectures of this professor.
9. People speak about this new film.

Ex. 6. *Put questions to the underlined words.*

1. The letter will be answered tomorrow. (2)
2. Our town was founded in the 11th century. (3)
3. I was told the news when I came. (3)
4. The concert was much spoken about. (1)

Ex. 7. *Put questions WHEN and WHERE using the Passive Voice.*

1. We wrote a dictation yesterday. (when)
2. The boys and girls watered the flowers in the morning. (when)
3. We met our professor in the library. (where)
4. The students made composition at home. (where)
5. We spoke about the lecture during the break. (when)



Ex. 8. Answer the following questions.

1. When was Kyiv founded?
2. By whom was it founded?
3. Where is Ukraine situated?
4. What parts is Great Britain composed by?
5. What industries are developed in this country?
6. How many foreign languages are taught at your college?
7. What language is spoken in Ukraine (the USA, Great Britain)?
8. In what countries is English spoken?
9. Is your coat made of cotton or wool?
10. When was your college founded?
11. What is being built in your town (village)?

### Non-Finite Forms of the Verb

(неособові форми дієслова). Неособові дієслова (non-finite forms of the verbs) не змінюються за особами, не можуть бути присудком речення, не виражають часу дії.

**Інфінітив (the Infinitive)** - це незмінювана форма дієслова, яка, називаючи дію, вказує на відносний час і відповідає на питання «що робити?», «що зробити?»: to tell, to do, to work.

Проста форма інколи вживається без частки to (у словниках, після модальних дієслів, після допоміжних дієслів shall, will.

I can speak. You will go.

В англійській мові інфінітив має одну просту і п'ять складних форм.

Форми інфінітива	Active	Passive
Indefinite	to write	to be written
Continuous	to be writing	_____
Perfect	to have written	to have been written
Perfect- Continuous	to have been writing	_____

Ознакою інфінітива в англійській мові є частка *to* (крім деяких випадків). Частка *not* перед інфінітивом вказує на заперечну форму.

### Функції.

- в ролі підмета: *To know people is to trust them.*
- в ролі іменної частини складеного присудка:  
*The point is to achieve the aim.*
- частини дієслівного складеного присудка:  
*We must stay at home. I want to go. We began to talk.*
- в ролі додатка до дієслів та дієприкметників:  
*She had no need to ask.*
- в ролі обставини:  
*She has come to meet him. It was too cold to go out.*

### Дієприкметник. (The Participle).

Дієприкметник (the Participle) - це неособова форма дієслова, що має властивості дієслова, прикметника і прислівника. У англійській мові є два дієприкметники - дієприкметник теперішнього часу (Present Participle або Participle I) і дієприкметник минулого часу (Past Participle або Participle II).

Present Participle утворюється за допомогою закінчення *-ing*, яке додається до інфінітива дієслова без частки *to*. Past Participle правильних дієслів утворюється за допомогою закінчення *-ed*, що додається до інфінітива без частки *to* (як і форма Past Indefinite). Past Participle неправильних дієслів утворюється по-різному, ці форми треба запам'ятати. (Таблиця неправильних дієслів).

### Форми дієприкметників.

Форма дієприкметника	Перехідні дієслова		Неперехідні
	Active Voice	Passive Voice	Active Voice
Participle I	asking	being asked	going
Participle II	asked	gone	
Perfect Participle	having asked	having been asked	having gone



### Функції дієприкметників.

Present Participle Active вживається у

- функції означення:

The reading boy is my friend.

- функції обставин (часу, причини, способу дії):

Entering the room, he saw his sister. Living in the country, I saw them every summer. I stopped at once, remembering the presence of my parents.

Present Participle Passive вживається у

- функції обставини :

Being written badly, the paper was difficult to read.

- функції означення:

The hospital being built in a new district will serve its inhabitants.

Perfect Participle Active і Passive вживаються у функції обставин:

Having done the work the students went home.

Having been produced 10 years ago, the medicine now is out of date.

Past Participle найчастіше буває означенням:

He is a well-known anatomist а також у функції обставин (часу, причини, мети, способу дії і порівняння).

Frightened by the big dog, the woman stopped walking. У функції предикатива:

When she came suddenly in, the window was broken.

### Герундій

(The Gerund)

The Gerund - це неособова форма дієслова із закінченням -ing, що має властивості дієслова й іменника.

Герундій називає дію:

reading - читання

listening - слухання

speaking - говоріння

Герундій має неозначену й перфектну форми, вживається в активному і пасивному стані.

	Active	Passive
Indefinite	writing	being written
Perfect	having written	having been written

Перед герундієм може вживатися прийменник, тому герундій вживається після дієслів, прикметників, виразів, які вимагають додатка з прийменником.

Thank you for coming to me. I am fond of swimming.  
We went on eating. They began playing. We continued sitting in the hall.

На українську мову герундій перекладається

1) інфінітивом:

I dreamed of coming to see you. (провідати)

2) іменником:

He liked reading. (читання)

3) дієприслівником:

I continued my work without looking up. (не розгинаючись)

4) предикативною формою дієслова підрядного речення:

I tried to touch her without her seeing me. (не помітив)

## Moods

(Способи дієслова)

У англійській мові, як і в українській, є три способи дієслова: дійсний (The Indicative Mood), умовний (The Subjunctive Mood) і наказовий (The Imperative Mood).

Дійсний спосіб виражає дію як реальний факт у теперішньому, минулому і майбутньому часі:

He lives in Poltava. She comes from Kyiv. I shall go to the South.

Умовний спосіб виражає дію не як реальну, а як таку, що могла б відбутися за певних умов, а також необхідну, бажану або нереальну, нездійсненну.

У англійській мові вживаються чотири форми умовного способу: The Conditional Mood, Subjunctive I, Subjunctive II, the Suppositional Mood.



## **Conditional Mood**

утворюється з допоміжних дієслів *should* і *would* та інфінітива основного дієслова без частки *to*. Conditional Mood вживається для

вираження дії, яка відбулася б за певних умов у теперішньому часі, але не відбудеться з якихось причин:

*I would call on him but I have no time.*

Past conditional утворюється з допомогою слів *should/would* та перфектної форми інфінітива основного дієслова.

*I should/would have done it but I had no time.*

## **Subjunctive II**

Present Subjunctive II виражає нереальну дію, що суперечить дійсності і відноситься переважно до теперішнього або майбутнього часу.

*If I saw you tomorrow I should (I'd) tell you about it.*

Past Subjunctive II виражає нереальну дію у минулому:

*If you had met him he would have told you about it.*

## **Subjunctive I**

має тільки одну форму для всіх осіб однини і множини, яка збігається з інфінітивом без частки *to* (*I go, she go, I be, She be, I have, She have etc.*)

Subjunctive I вживається для вираження необхідної, бажаної дії, яка може відбутися. Subjunctive I не має часових форм:

*The doctor demands (demanded, will demand) that all of us be attentive.*

## **The Suppositional Mood**

утворюється з допоміжного дієслова *should* (у всіх особах) та інфінітива основного дієслова без частки *to* і має дві часові форми:

present і past.

Pr.: *I (you, he, we, they) should do it.*

Past: *I (you, he, we, they) should have done it.*

У підрядних реченнях, що стосуються майбутнього часу, для підкреслення малої імовірності припущення:

If you should meet him somewhere, you might do this work with him.

### **The Imperative Mood**

виражає спонукання до дії, тобто прохання, наказ, пораду, за-прошення, застереження. У англійській мові є лише одна форма наказового способу, яка збігається з інфінітивом без частки to.

Go! Йди!

Write! Пиши!

Bring it to me!

Принеси це мені!

Заперечна форма:

Don't go there! Не йди!

Don't be angry! Не сердься!

### **The Objective Infinitive Complex.**

consists of a noun in the Common Case or a personal pronoun in the Objective Case and the Infinitive. The nominal part of the complex denotes the subject or the object of the action expressed by the Infinitive.

In the sentence this complex has the function of complex object. The Objective Infinitive Complex is used after verbs denoting perception of senses, wish, intention, emotion, mental activity, order, request, permission, advice, compulsion.

- I like Peter to play tennis.

- I like him to play tennis.

- We saw Ann cry.

(After the verbs: to see, to hear, to feel, to watch, to observe, to notice the infinitive is used without particle to.)

- I felt the pain become less.

- I heard my friend speak aloud.

But: - He wanted me to read this magazine.

- I expected him to return.

- She ordered some tea to be put on the table.

(After the verbs to make, to force, to let the infinitive is used without particle to).

- They made him work.

- We let him go.



## The Subjective Infinitive Complex

consists of a noun in the Common Case or a personal pronoun in the Nominative Case and the Infinitive. The nominal part of the complex may denote both the Subject and the Object of the action expected by the Infinitive.

The Subjective Infinitive Complex is used with the verbs: to say, to report, the verbs denoting mental activity, sense perceptions, order, request, permission, compulsion, with the verbs to seem, to appear, to happen, to chance, to prove, to turn out, to be likely, to be sure, to be certain etc.)

- He is said to write a new novel. Кажуть, що він пише новий роман.
- The lecture is expected to be in the afternoon.
- She was seen to enter the house.
- He was ordered to leave the classroom.
- She seemed to listen to him.
- I am not likely to meet him often.
- We are sure to know about it.

## The Prepositional Infinitive Complex

consists of the noun in the Common Case or the personal pronoun in the Objective case and the Infinitive.

- It's time for me to go.
- It's for you to think of.
- She waited for her to speak.

## Practice exercises

( to the grammar material given above )

### Infinitive.

Ex. 1. Make up five sentences from each table.

I	am	sorry	to be given this task.
He	is	pleased	to meet you.
She	are	happy	to be late.
We	was	glad	to have missed the bus.
You	were		not to have been said about it.
They	will be		not to hear it.

I	hate like love want	to tell you about it. to be sent to that place. to be called when I am ill. to play tennis. to be troubled when I am at home.
---	------------------------------	---

I He She We They	can may must	bring it home. be found in that place. show you this way to the Institute. be shown the way to the Institute.
------------------------------	--------------------	--

Ex. 2. *Translate into English using the Infinitive.*

1. Я радий, що працюю разом з нею. 2. Я радий, що працюю разом з ними. 3. Він щасливий, що вчиться в цьому коледжі. 4. Мені незручно, що я турбую вас. 5. Мені незручно, що я потурбував вас. 6. Він буде радий поїхати до батьків. 7. Вона рада запросити вас на вечір. 8. Я радий, що запросив вас на свято. 9. Я радий, що мене запросили на вечір. 10. Я радий послати вам цей журнал. 11. Я радий, що мене посилають на конференцію. 12. Я радий, що мене послали на конференцію. 13. Він хоче послати їй телеграму. 14. Я хочу, щоб мене послали на конференцію. 15. Він не хоче, щоб його там побачили. 16. Хлопчик любить, щоб йому розповідали казки. 17. Хлопчик любить розповідати казки. 18. Забути цей день було важко. 19. Вчитися наполегливо - завдання кожного студента. 20. Її мета - стати лікарем. 21. Ваше завдання - написати твір про свої канікули. 22. Наше завдання полягало в тому, щоб закінчити роботу до 1 січня. 23. Він перший допоміг нам. 24. Вона першою розповіла мені про це. 25. Він перший пішов додому.



Ex. 3. *Make up five sentences from each table.*

I He She We You They	noticed watched heard saw	the man him her you them	approach the house. leave the class-room. play tennis. sing a song. enter the building.
I He She We You They	forced caused let made	her him you me	(to) read the text aloud. learn the poem by heart. do it at home. buy this book. do the exercise again.
I He She We You They	would like should like like(s) want(s) wanted	her him you me the girls	to become a doctor. to be here that time. to speak English. to stay with us. to hear it.
I He She We You They	expect(s) expected	her him you them us	to come back home. to help me. to arrive there on Sunday. to win the game. to answer the telegramme.
He She You They	is was are are	said reported	to be writing an article. to have finished the school. to have arrived to Kyiv. to have been teaching here. to learn English.
I He She We They	is was am were	known expected believed considered	to be fond of music. to be very ill. to be interested in Biology. to make a present for him. to arrive to Kyiv that day.

I	am	heard	to approach the house.
He	is	seen	to unlock the door.
She	are	watched	to burst out laughing.
We	was	noticed	to play tennis.
They	were		to go along the street.

I	am	certain	to be here in time.
He	is	sure	to know English.
She	are	likely	to lose the book.
We	was		to solve the problem.
You	were		to set a good mark.
They			

It	is	better	for	you	to be here.
	was	high time		me	to go to the cinema.
	will be	dangerous		him	to cross the street.
		important		her	to buy a book.
				us	to take a taxi.
				them	

The best thing	is	for	you	to go home on foot.
	was		him	to wait a bit.
	will be		her	to consult a doctor.
	would be		me	to invite him for.
			us	to do it at once.
			them	

I	wait(s)	for	you	to go out.
He	waited		him	to come in.
She	will wait		me	to speak with.
We			them	to come back.
You			us	to put questions.
They				to answer

Ex. 4. Make up five sentences from each table.

### Participle I.



I He She We You They	came up to called approached	the boy the woman the man the students	digging potatoes. working in the garden. playing football. sitting in the class. reading a text.
-------------------------------------	------------------------------------	---	--

The boy The girl The man The woman The student	sitting in the corner standing at the window making a report coming to us crossing the road	is a good swimmer. works at the office. dances very well. is my friend. lives near the college.
--	---	---

I He She We You They	read an article stood sat went away	smiling. reading a text. singing a song. trembling. listening to the radio.
-------------------------------------	--	---

Entering the hall Hearing the voice Seeing Coming	I he she we you they	found nobody in it. greeted her. recognized him at once. decided to tell him the truth. apologized to him.
--	-------------------------------------	--

Having	written an article cleaned the window done it finished the work read a book	I he she we you they	decided to rest. went shopping. switch on the TV set. went to the shop. went for a walk.
--------	---	-------------------------------------	--

When While	reading a story playing tennis preparing the report watching TV translating the text	I he she we you they	heard a knock at the door. used a dictionary. fell asleep. forgot about it. did not know what to do.
---------------	--	-------------------------------------	--

I	found	him	playing football.
He	observed	her	swimming across the river.
She	noticed	you	skating on the pond.
We	watched	us	climbing the mountain.
You	heard	them	whispering something.
They	saw		

I	was	heard	playing tennis.
He	were	seen	entering the house.
She		noticed	running away.
We			walking along the street.
You			crying.
They			

I	had	his	trousers made.
He	will have	her	hair cut.
She		my	rain-coat cleaned.
We		your	breakfast cooked.
You		their	work done.
They		our	

The weather being very nasty		I was very upset.
		we put off the trip.
		they had to stay at home.
		she had to put on a coat.
		he heated the room.

### Gerund

Ex.5. *Make up five sentences from each table.*

I	succeeded in	learning the rules.
He	thought of	doing morning exercises.
She	agreed to	buying the tickets.
We	objected to	visiting the gallery.
You	insisted on	helping them.
They		



I	gave up	playing football.
He	enjoyed	laughing.
She	couldn't help	meeting them at the station.
We	finished	smoking indoors.
You	suggested	learning the foreign languages.
They		

On	leaving for Poltava	I	began to work.
After	coming back home	he	spent a day at home.
Before	recovering	she	bought a ticket.
	getting to the place	we	had a good rest.
	entering the college	they	decided to do it.

I	dreamed of	his	being sent there.
He	objected to	her	going home.
She	thought of	my	coming back to town.
We	looked forward to	your	being given this task.
You	insisted on	our	being invited to the party.
They		their	

I	is	proud of	his	having won the game.
He	are	sure of	her	behaving in such a way.
She	am	surprised at	my	being invited to the party.
We	was	pleased with	our	playing well.
You	were		your	having talked about it.
They			their	

Ex. 6. *Translate into English using the gerund.*

1. Викладач заперечував проти того, щоб ми пішли в кіно.
2. Вони не заперечують проти того, щоб ми приєдналися до них.
3. Ви не заперечуєте проти того, щоб я відкрив вікно.
4. Я заперечую проти того, щоб це питання обговорювалося в цей час.
5. Пробачте, що я взяв у вас цей конспект.
6. Пробачте, що я прийшов невчасно.
7. Пробачте, що я перебиваю вас.
8. Пробачте, що мої студенти говорили так голосно.
9. Пробачте, що я телефоную так рано.
10. Дякую за те, що ви показали мені виставку.
11. Дякую, що ти провів мене додому.
12. Дякую, що ви пояснили мені ці умови.

13. Мене дивує, що він зробив багато помилок. 14. Мені дивно, що ви пропустили стільки уроків. 15. Мені дивно, що ця команда програла матч. 16. Вона наполягала на тому, щоб ми прийшли вчасно. 17. Я наполягала на тому, щоб ти негайно приїхав до Полтави. 18. Ми наполягаємо на тому, щоб ця школа була відремонтована. 19. Він пішов додому, не вимкнувши телевізора. 20. Студенти пішли додому, не обговоривши це питання. 21. Ми не можемо піти до театру, не купивши квитків. 22. Він вивчив багато слів, читаючи щоденні газети. 23. Вона дуже допомогла мені, пояснюючи правила. 24. Замість того, щоб писати листа, я надішлю телеграму. 25. Я не мала нагоди поговорити з нею. 26. Вона має добру звичку писати слова в словниках. 27. Ви не мали можливості користуватися магнітофоном. 28. Цей будинок вимагає ремонту. 29. Я зайнятий перекладом тексту. 30. Цей фільм варто подивитися.

### The Subjunctive Mood

Ex. 7. Make up five sentences from each table.

In your place But for me But for the good weather	I he she we you they	should would	be sent to Kyiv. go to for a walk. stay at home. take a short rest.
--	-------------------------------------	-----------------	--

But for the rain In your place But for them	I he she we you they	should have would have (been)	gone on excursion. last in the forest. bought this book. sent here. slept in the garden.
---	-------------------------------------	-------------------------------------	--



I	should return the book	next day.
He	should visit the gallery	tomorrow.
She	would have done it	yesterday.
We	would have build the house	this morning.
You	would go to the cinema	last month.
They		

I wish	he were at home	now.
	she knew my address	today.
	you were not so busy	yesterday.
	I had been taken there	at present.
	I had finished the work	at that time.
	he worked at the college	then

If	I	had time	I	should	do that.
	he	were you	he	would	go there.
	she	had much money	me		read a book.
	we	were free	she		send a telegramme.
	you	were young	you		play a game.
	they	liked it	they		play tennis.
					walk a bit.

If	I	had	received a message	I	should be in time.
	he		been there	he	have done it.
	she		known it	she	would visited him.
	we		had enough time	we	have been glad.
	you		had a lot of money	you	taken a tram.
	they			they	bought it.

It is	important	that	they would hand in their theses.
It was	desirable		Peter should go there.
	necessary		she should write a composition.
			the film should be discussed.
			we would do this task.

I'm afraid	est	we should miss the ship.
I was afraid		the drug-store should be closed.
I worry		she should forget to write him
		the students should lose their books
		she should fail at the exam.

It is	a pity	that	you should have caught cold.
It was	natural		you should have prepared it.
	possible		he should be so careless.
	impossible		she should think so.
	a shame		Ann should have made so many mistakes in her exercises.

Ex. 8. *Translate into English.*

1. Якби він подзвонив мені вчора, я приніс би книжку.
2. Якби зараз була зима, ми б ходили на лижах.
3. Ми читали б книжки в оригіналі, якби знали англійську мову.
4. Якби я був на твоєму місці, я б не відмовився взяти участь в конференції.
5. Якби ти прийшов учора, ти б мене застав удома.
6. На твоєму місці я б поїхав поїздом.
7. Вона купила б гітару минулого року, але в неї не було грошей.
8. Я певна, щомій батькодopoмiг би вам відремонтувати квартиру.
9. Якби не він, ми б заблукали.
10. Якби не сніг, діти б не пішли гратися.
11. Хотілося б, щоб все було гаразд.
12. Шкода, щоти не взяв участь в змаганнях.
13. Шкода, щоти не бачив мою сестру.
14. Хотілося б, щоб ви прийшли завтра.
15. Даремноти сказав їй процей випадок.
16. На жаль, ти не знаєш англійської мови.
17. Прикро, що вона не закінчила роботу вчасно.
18. Шкода, що вона запізнилася на поїзд.
19. Сьогодні так тепло, ніби вже літо.
20. У нього такий вигляд, ніби він дуже стомлений.
21. Мені здається, ніби я ніколи не бачив такого озера.
22. Петро такий веселий, наче він уже не хворий.
23. Моя сестра поводить ся так, наче вона дитина.
24. Він говорить так, ніби зовсім нічого про це не знає.
25. Вона так добре знає його, ніби провела з ним багато років.
26. Вона так дивилась на мене, ніби збиралась щось сказати.
27. Необхідно, щоб студенти робили цю лабораторну роботу.
28. Дуже важливо, щоб ти прочитав цю статтю.
29. Староста групи запропонував, щоб ці студенти взяли участь в конференції.
30. Не може бути, щоб вони вже зробили цю роботу.



## **Lesson Seven**

### **(The Seventh Lesson)**

... continued

### **Medical Education in Ukraine.**

The beginning of doctor's training in Ukraine goes far back to the history. First in the 11th century it was on the base of hospitals which at that time were mostly in the form of alms-houses, much later in the 17th century some medical schools were opened. Their graduates were to give medical aid to the wounded Bogdan Khmelnytsky's troops. In 1632 the Academy was founded in Kyiv. Many former students of this Academy continued their education abroad and received their Doctor's degrees there and became the well-known medical scientists: the epidemiologist D.S. Samoilovich, the obstetrician N. M. Ambolyk-Maximovich, the pediatrician S.F. Chotovytsky and others. Medical departments were founded at the Universities in Kyiv, Kharkiv, Lviv and Odesa in the 19th century. At present time in Ukraine there are 15 medical colleges - Academies, Universities and Institutes. Every year many young people who care for medicine enter medical colleges and become students at medical, stomatological, pediatric departments. Some students live in hostels, others with their relatives. Those who have only «fives» in all subjects get stipend. The students work much in class at the laboratories and libraries. Those who want to become not ordinary doctors pay much attention to modern medical literature, they read special medical magazines, in native and foreign languages. From the first year of study some students join students scientific societies. There they work on

those subjects which they care for. It may be Anatomy, Biology, Chemistry, Physiology. The senior students may join the scientific societies on Therapy, Surgery, Orthopedics and others. Such work will help future doctors to understand better the character of many diseases, to know the modern methods of their treatment. During the first two years the students master the so called preclinical subjects - Physics, Chemistry, Biology, Human Anatomy, Histology and others. From the third year the students have clinical subjects. They learn how to diagnose, to carry out laboratory analysis, to treat patients. At the end of each academic year the students have practical training at the hospitals, polyclinics and other medical institutions. During the last (the fifth or the sixth) year the students gain more experience in one of the main clinical subjects. When the students complete subinternship (субординатура) they get their work appointment and for one or two years they work as interns under the guidance of qualified specialists. Such system helps to prepare good specialist in all fields of medicine.

### **Active vocabulary**

Translate the words

alms-houses -  
graduates -  
abroad -  
degree -  
obstetrician -  
hostel -  
relatives -  
ordinary -  
to care for -  
scientific society -  
to treat -  
senior -  
master -  
to carry out -  
practical training -  
institution -  
experience -  
appointment -



inter -  
internship -  
junior -

Find the Ukrainian equivalents in the dictionary and learn the words.

### **Practice exercises.**

Ex. 1. *Answer the following questions.*

1. What can you tell us about the beginning of doctor's training in Ukraine?
2. When was the Academy in Kyiv found?
3. Who received doctor's degrees abroad?
4. What universities found the medical department?
5. How many medical colleges are there in Ukraine?
6. Who enters the medical colleges?
7. Where do the students live?
8. Do all students get stipends?
9. What do the students do to become not ordinary doctors?
10. What can you say about the scientific societies?
11. What subjects attract students attention during their study?
12. What does the work in the scientific society help to understand?
13. What subject do the junior students learn?
14. What do the senior students learn?
15. When do the students have practical training?
16. Do students specialize during the last year of study? (subinternship)
17. What do the students get after graduation?

Ex. 2. *Translate the following word combinations and make up your own sentences using them.*

1. into the lecture hall; from the lecture hall; 2. among the students; 3. at the lesson; 4. at about 5 o'clock. 5. on the 1st of April; 6. from 8:30 a.m. till 4:40 p.m.; 7. during the session; 8. in January.

Ex. 3. *Fill in the blanks with the necessary words.*

1. ... do you usually read in the evening? (when, where).
2. ... is on the table? (what, who).
3. He works at the hospital. ... is he? (who, what).
4. ... month is June? (which, whose).
5. ... has Biology lesson today? (who, what).

Ex. 4. *Answer the questions.*

1. Do you learn Chemistry or do you already passed the examination?
2. Does your friend know English well?
3. What subjects do you like most?
4. Which of your group is always in time for the lessons?
5. How often do you get books from the library?
6. What magazines do you read in the library?
7. Do you read articles from foreign magazines?
8. Are you going to revise Latin terms?
9. Are you going to take credit test on the Latin language?
10. What are you going to speak about in class at the Biology lesson?
11. When do you usually get home after classes?
12. What do you like to do in the evening?
13. What are you going to do tomorrow evening?
14. How do you get to the college?
15. How well do you know Anatomy?
16. How well do you translate from English?
17. What subjects do you study during the first term?

Ex. 5. *Open the brackets using the necessary form of the personal pronouns.*

1. I know this student. He studies with (I).
2. These are very good exercises. Do (they) at home, please.
3. This doctor works at the hospital. I know (he) well.
4. Read this text and translate (it) into Ukrainian.
5. Let's go with (we) to the laboratory.

Ex. 6. *Fill in the blanks with the personal pronouns.*

1. Take this book and read ... at home, please.
2. Is he



going to speak to ... about ... new book? 3. These are very good exercise-books. Where do you get ... ? 4. ... sister knows English well. I often do my homework with ... . 5. Read these words and learn ... well. 6. I don't know ... . What is ... name? 7. Our teacher teaches ... English well.

Ex. 7. *Put the following into negative and interrogative.*

1. She translates many English articles into Ukrainian.
2. The professor delivers his lecture.
3. Your friend reads a lot after classes.
4. I get letters from my friends very often.
5. Our group works too much in class.

Ex. 8. *Put questions to the underlined words.*

1. We discuss a lot of questions in class. (3)
2. Our lessons usually last two hours. (2)
3. The students usually get home after 5 o'clock p.m. (3)
4. I am going to work at the library after my lessons. (3)
5. You live a long way from the college. (1)

Ex. 9. *Fill in the blanks with the prepositions where necessary.*

1. Does your friend work ... the office? No, he studies ... in the college. Does he live far ... college. Yes, he lives a long way ... it.
2. Peter has a dog. He often takes it ... for a walk. He lives near ... the park. ... Sunday his sister Ann takes the dog ... walk ... the park, because Peter is busy.
3. Our students get ... home ... 5 o'clock ... the evening.
4. This is a letter ... my friend. I am going to answer ... it now. My friend is coming ... Kyiv. I'm going to meet ... him ... Wednesday ... evening ... 7 o'clock ... the station.
5. We do a lot ... exercises ... class and ... classes ... home.
6. Do you often stay ... classes ... the library?
7. ... summer I'm going ... the seaside.

Ex. 10. *Put and answer the following questions (to work in pairs).*

1. Do you work at a factory?
2. Do you live far from the college?
3. Do you walk to the college or take a bus?

4. On which days do you work?
5. How long does your working day last?
6. How many hours does your lesson of English last?
7. What do you do at the lessons?
8. What time do you usually finish your work in class?
9. Where do you sometimes stay after classes?
10. When do you return home?
11. What do you do on Sundays?
12. Do you often stay in town over the week-end?
13. What do you usually do at the week-end?
14. Who do you often stay with over the week-end?
15. Do you like walking?
16. Where do you like walking?
17. Who do you usually take out for a walk?
18. When do you like to walk, in the morning or in the evening?
19. What do you discuss during the working day?
20. Do you sometimes work at the week-end?
21. What are you going to do this week-end?
22. Are you going to stay at home over the week-end?
23. Are you going to Kyiv for the week-end?
24. How many new English words do you learn in class (at the lesson)?

Ex. 11. *Use the words given in brackets in the necessary form.*

1. He usually (to walk) home after classes.
2. Where (to work) Peter?
3. You often (to speak) in class?
4. Who (to answer) the questions now?
5. I often (not to get) letters from my friend?
6. Who often (to discuss) plans with the teacher?
7. They (to revise) the words now?

Ex. 12. *Translate the sentences paying attention to the tense of the predicate.*

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. He reads books in the evening.</li> <li>2. They read much every day.</li> <li>3. I write letters on Sunday.</li> </ol> | <ol style="list-style-type: none"> <li>1. He is reading a book now.</li> <li>2. They are reading at the lesson now.</li> <li>3. I am writing a letter now.</li> </ol> |
|--|---|



1. He reads books on holidays.

2. I wrote letters every Sunday on holidays. when she came.

1. She will read this book next month.

2. I shall do this work tomorrow.

1. He was reading a book at 5 o'clock yesterday.

2. I was writing a letter

1. She will be reading a book from 5 till 7 o'clock.

2. I shall be doing this work when you come.

Ex. 13. *Put the words given in brackets into Present Continuous and Present Indefinite making necessary changes.*

Example: Every day I go to college. I am going to the college now.

1. Every morning I (to go) to the office.

2. She (to tell) an interesting story now.

3. She (to go) to the canteen now.

4. My friend always (to tell) me the news.

5. They (to do) the home exercises now.

6. Tomorrow from 10 till 12 o'clock I (to do) my homework.

7. I (to write) a letter, when she came.

Ex. 14. *Make up short situations using the following word combinations.*

1. a long way from, to go on foot (to walk), a lot of exercises, in class, at the lesson, to have English the morning.

2. in the morning, in the daytime, to take smb' out, to go for a walk, together, to stay at home, at the week-end.

## **Lesson Eight**

### **(The Eighth Lesson)**

... continued

### **Medical Education in Great Britain.**

In Great Britain a young man who has secondary education must pass through 5-7 years of hard study at a medical college and only then he or she begins to work as a doctor at the medical institution.

There are 16 Universities and the Royal College of Physicians that train doctors and dentists of different specialities.

The General Medical Council is the Governing Body of the medical profession. But there is no standard curriculum for all medical colleges and faculties.

The course of studies lasts from 5 to 7 years at different colleges, when for dentists it is 4 years.

The students have to pay for their training. The value of educational training differs in different colleges, but the average pay for training is rather high (more than 2000\$). Only the advanced students who have very high index in all the subjects may get grants.

The students usually live in hostels or private houses and the fees are charged for places of residence.

The premedical training usually includes the fundamental subjects such as: Biology, Chemistry, Physiology, Histology and others. Only those students who have good results in the premedical course of studies are allowed to continue their education. All the rest may work at hospitals as nurses.

Only some students (but they are few) are recommended to go in for research.

Senior students work at hospitals, they learn much of the medical procedures and treatment of the diseases to be well prepared for their work.

As a rule the students do not get their work appointments



after graduation. Most of them make their own arrangements for work beforehand.

Ex. 1. *Put 10-20 questions to the above given text (general, special and alternative questions) when, where, what, who, which of, how well, how often, how long.*

### **Medical Education in the USA**

(in form of a dialogue to be learned)

P: How long does it take to become a practicing doctor in the USA?

A: It takes from 8 to 13 years depending on the speciality.

P: What subjects does premedical training include?

A: It includes Mathematics, Physics, Chemistry, Quantative Analysis, Foreign languages and Literature. It lasts 3 years. Those who have completed premedical education are allowed to work as nurses after having a short course of practical training.

P: How can a person become a student of the USA high medical school?

A: A person can become a student if he makes top grades in premedical training.

P: What subjects are included in the curriculum?

A: They are Biochemistry, Anatomy, Physiology, History of Medicine, Biomathematics, Microbiology, Pathology, Physical Diagnosis, Pharmacology and Laboratory Diagnosis.

P: When does a student come in touch with the patients?

A: It is in the third and fourth years.

P: What are then the basic subjects for senior students?

A: They are clinical ones: all branches of Therapy, Surgery, Obstetrics and Gynecology, some special fields of Dentistry (for dentists only).

P: Are graduates allowed to practice right after graduation?

A: No, they are not. They have to serve as interns first.

P: What's then?

A: If a graduate wants to specialize in some field of medicine he/she must go through 3-5 years as a resident at an out-

standing hospital.

P: Is medical education free of charge or partially paid?

A: Medical education is very expensive only the best students are given the scholarship.

P: Thank you. And the last question. Where do students and residents live?

A: Students usually live in the hostels and residents - in the hospitals where they work and master their practitioner's skills to get into the Association.

P: Thank you very much. I knew many interesting things about education in the USA.

**Direct and Indirect Speech.** In direct speech the exact words of the speaker are given, in indirect speech the speaker reports in his own words what someone said before.

### Statements in Indirect Speech

Direct Speech	Indirect Speech
Doctor Brown says: «I must pay much money for the house.»	Doctor Brown says that he must pay much money for the house.

### *Rules for Changing from Direct into Indirect Speech.*

The personal pronoun is changed according to the sense. If the verb of the introductory sentence is in the present tense and the reported action refers to the present, the tense forms of the verbs of both clauses in indirect speech remain the same. The conjunction is not used in colloquial speech.

### **Let's laugh a little.**

Change this dialogue into indirect speech

Patient: Oh, Doctor, I have a pain in my back.

Doctor: Do you feel the pain all the time?

Patient: No, I don't. Only sometimes.

Doctor: Here are the tablets. Take one tablet five minutes before the pain begins.



**Lesson Nine**  
(The Ninth Lesson)  
We study Anatomy.

... continued

Ex. 1. *Read the text.*

**Some notes of Anatomy.**

Anatomy as an independent science dates from the 16th century. Its founder was Andreas Vesalius (1514-1564) who dissected numerous human corpses and studied the structure of the human body. His studies were summarized in the outstanding scientific work «The Structure of the Human Body».

Now we can mention that there are nine main systems of the body: the skeletal, the muscular, the nervous, the circulatory, the digestive, the respiratory, the urinary, the endocrine and the reproductive systems. Let's speak about the musculoskeletal one. It includes the bones, muscles and joints. Each has several important functions in the body. Bones by providing the framework around which the body is constructed, protect and support our internal organs. Also, by serving as a point of attachment for muscles, bones assist in body movement. The inner core of bones is composed of hematopoietic tissue (red bone marrow manufactures blood cells), while other parts are storage areas for minerals necessary for growth such as calcium and phosphorus.

Joints are the places where bones come together. Several different types of joints are found within the body. The type of joint in any specific location is determined by the need for greater or less flexibility of movement. Muscles, whether attached to bones or to internal organs and blood vessels, are responsible for movement. Internal movement involves the contraction and relaxation of muscles which are the part of viscera, and the external movement is accomplished by the contraction and relaxation of muscles which are attached to bones.

### Active words and word combination.

to dissect - препарувати  
to provide - забезпечувати  
a framework - каркас  
to serve - служити  
a point of attachment - місце прив'язки  
a movement - рух  
inner core - внутрішня серцевина  
a tissue - тканина  
a marrow - кістний мозок  
storage - зберігання, склад  
an area - область, район  
to be found - бути виявленим  
to determine - визначати  
a need - нужда, необхідність  
flexibility - рухливість  
vessel - судина  
to involve - включати в щось, залучати до чогось  
to accomplish - закінчуватися

### Practice exercises

Ex. 1. *Answer the following questions.*

1. Is Anatomy an independent science?
2. Who was the founder of this science?
3. What did Andreas Vesalius do investigating the human body?
4. How is Vesalius' main scientific work called?
5. How many systems are there in the human body?
6. What are they?
7. What are the functions of the bones?
8. What can you say about joints?
9. What are the muscles responsible for?
10. What types of muscles do you know?

Ex. 2. *Compose your own sentences according to the model.*

*To be done in a written form.*

Model 1. The house was built last month. The house wasn't built last month. The house will be built next month. When will the house be built?



to be found, to be done, to be read, to be written, to be learnt, to be translated, to be discussed, to be finished, to be composed, to be used, to be taken, to be given.

Model 2. I have been asked to come at 2:00.

to be given a lot of work to do; to be shown the way to the hospital; to be told to learn the poem by heart; to be asked to compose a dialogue.

Model 3. The problem must be discussed. Can the problem be discussed that time? This problem may not be discussed after work.

to be used, to be met, to be spoken to, to be found, to be sent (for), to be done, to be shown, to be translated into, to be finished, to be given (back), to be decided.

Ex. 3. *Read the text, entitle it. Put five seven questions to it.*

The main part of the head and face is called the skull. The skull is composed of twenty-six bones. These bones form two basic parts of the skull-facial and cranial ones. The bones of the skull are connected with the cervical vertebrae. The bones of the skull are connected together very firmly.

The bones of the skull form one large cavity and some smaller cavities. The large cavity is called the cranial cavity. The brain is in the cranial cavity. One of the smaller cavities is the oral cavity and the other is the cavity of the nose. The other two cavities are the orbits. The eyeballs are in the orbits.

Ex. 4. *Read the text. Compose the plan of the text.*

### **Systems of the body**

There are several main systems of the body: the skeletal, the muscular, the nervous, the circulatory, the digestive, the respiratory, the urinary, the endocrine and the reproductive systems.

The skeletal system consists of the bones of the body and ligaments and cartilages which join them. The chief function of the skeletal system is structural.

The muscular system consists of the skeletal muscles and their associated structures. The main function of this system is

to move us about.

The nervous system consists of the brain and spinal cord, nerves, ganglia and receptors. It is a complex information system with all the necessary means for receiving, processing and communicating information.

The circulatory system consists of the heart and blood vessels and the blood which is pumped through the blood vessels by the heart. Its function is mainly that of transportation system: the nutrients, oxygen, special substances which are required by cells are carried by the blood stream; and the cellular wastes and sometimes other materials produced by the cells are carried away by the blood stream.

The digestive system consists of the alimentary canal and a number of associated glands.

The respiratory system consists of the lungs, the air passages leading to them and associated structures. Its main function is to convey oxygen to the lungs, where it can enter the blood stream and to remove carbon dioxide, which escapes from the blood into the lung spaces.

The urinary system consists of the kidneys, which produce urine by removing nitrogenous and other wastes from the blood: the two ureters, which convey the urine away from the kidneys; the urinary bladder (gall-bladder), where the urine is stored until it is discharged; and the urethra through which the urine is discharged.

The endocrine system consists of a number of glands throughout the body which produce regulatory substances called hormones. The endocrine system serves to regulate a large number of activities.

Ex. 5. *Answer the following questions.*

1. What are the function of the skeletal and muscular systems?
2. What is carried by the blood stream?
3. What is the chief function of the blood?
4. What does the nervous system consist of?
5. What is the main function of the respiratory system?
6. What does the urinary system consist of?
7. How do the kidneys produce urine?
8. How is the urine discharged from the body?



9. What are the largest glands of the endocrine system?
10. What do the glands produce?

## Structural Organization of the Body

### The Cell

The cell is the fundamental unit of every living thing (animal or plant). Cells are everywhere in the human body - every tissue, every organ is made up of these individual units.

**Similarity in Cells.** All cells are similar in that they contain a gelatinous substance composed of water, protein, sugar, acids, fats and various minerals. This substance is called protoplasm. All parts of a cell are described below and pictured schematically in Figure 3-1 as they might look when photographed with an electron microscope.

(1) Cell membrane. This structure surrounds and protects the internal environment of the cell, determining what passes in and out of the cell.

(2) Nucleus. The nucleus is the controlling structure of the cell. It controls the way a cell reproduces and contains genetic material which determines the functioning and structure of the cell. All the material within the nucleus is called nucleoplasm or karyoplasm.

(3) Chromosomes. These are 23 pairs of thin strands of genetic material (DNA) located within the nucleus of a cell.

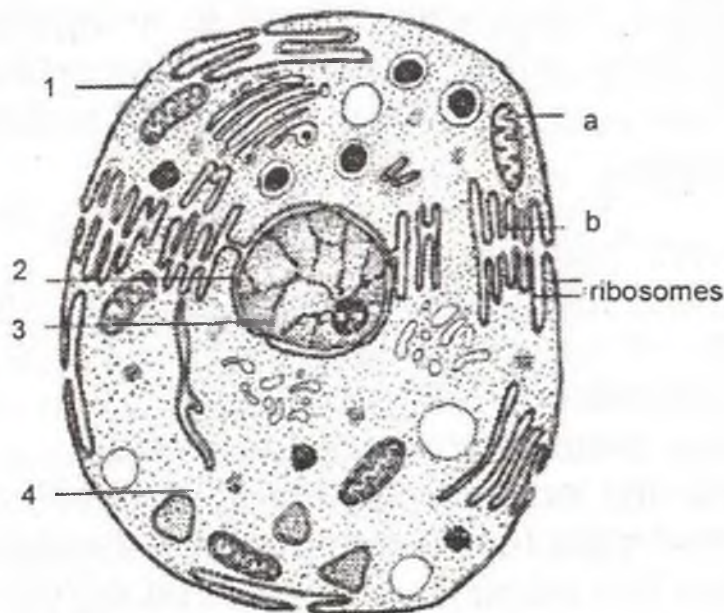


Figure 3-1 Major parts of a cell

These 23 pairs of chromosomes contain regions known as genes which determine our hereditary makeup. The DNA within chromosomes regulates the activities of each cell by guiding the formation of another substance, called RNA, which can leave the cell nucleus, enter the cytoplasm and direct the activities of the cell.

Chromosomes can be studied and classified as to size, arrangement, and number. This classification is called a karyotype. Karyotyping of chromosomes is useful in determining whether chromosomes are normal in number and structure.

(4) Cytoplasm. Cytoplasm is the protoplasmic material outside the nucleus. It carries on the work of the cell (in a muscle cell, it does the contracting; in a nerve cell, it transmits impulses). The cytoplasm contains: (a) Mitochondria - small bodies which carry on the production of energy in the cell by burning food in the presence of oxygen. This process is called catabolism. During catabolism complex structures are broken down into the simpler substances and energy is released.

(b) Endoplasmic reticulum - a series of canals within the cell. Some canals contain small bodies called ribosomes which help make substances (proteins) for the cell. This synthesizing process is called anabolism. Together the processes of catabolism and anabolism constitute the total metabolism of the cell.

**Difference in Cells.** Cells are different, or specialized, throughout the body to carry out their individual functions. For instance, a muscle cell is long and slender and contains fibers which aid it in contracting and relaxing; an epithelial, or skin, cell may be square and flat to provide

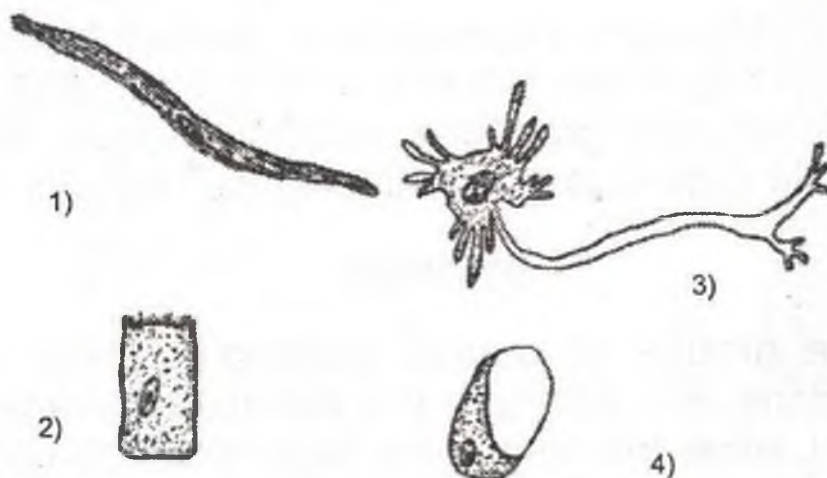


Figure 3-2 Types of cells. 1) muscle cell; 2) epithelial cell; 3) nerve cell; 4) fat cell.



protection; a nerve cell may be quite long and have various fibrous extensions which aid it in its job of carrying impulses: a fat cell contains large, empty spaces for fat storage. These are only a few of the many types of cells in the body. Study the different types of cells pictured in Figure 3-2.

## **Tissues**

A tissue is a group of similar cells working together to do a specific job. A histologist specializes in the study of tissues. Some types of tissues are:

**Epithelial Tissue.** Epithelial tissue is located in glands, skin, the digestive tract, and the urinary tract. It is necessary for protection, lining tubes and secretion.

**Muscle Tissue.** Voluntary muscle is found in arms and legs and parts of the body where movement is voluntary, while involuntary muscle is found in the heart and digestive system, as well as other places where movement is not under conscious control.

**Connective Tissue.** This can be fat (also called adipose tissue), cartilage (elastic, fibrous tissues attached to bones), bone, or blood.

**Nerve Tissue.** Nerve tissue conducts impulses all over the body.

## **Organs**

These are structures composed of several kinds of tissue. For example, an organ like the stomach is composed of muscle tissue, nerve tissue and glandular epithelial tissue. The medical term for internal organs is viscera. (singular: viscus).

## **Systems**

These are groups of organs working together to perform complex functions. For example, the mouth, esophagus, stomach and small and large intestines are organs which compose the digestive system.

Examine the list of the nine body systems below and become familiar with some of the organs within each system.

System	Organs
Digestive	Mouth,pharynx (throat),esophagus,stomach, intestines (small and large),liver, gallbladder,pancreas
Urinary,or secretory	Kidneys,ureters,urinary bladder,urethra.
Reproductive	<i>Female:</i> Ovaries,fallopian tubes,uterus, vagina,mammary glands. <i>Male:</i> Testes and assosiated tubes,urethra,penis, prostate gland
Endocrine	Thyroid gland,pituitary gland,sex glands ( ovaries and testes ),adrenal glands,pancreas ( islets of Langernas), parathyroid glands,pineal gland,thymus gland
Nervous	Brain,spinal cord,nerves and collections of nerves.
Cardiovascular	Heart,blood vessels ( arteries,veins and capillaries),lymphatic vessels and nodes,spleen,thymus gland
Muscular	Muscles
Skeletal	Bones and joints

### Anatomical Divisions of the back (Spinal Column)

The back is separated into divisions corresponding to regions of the spinal column.The spinal column is composed of 4

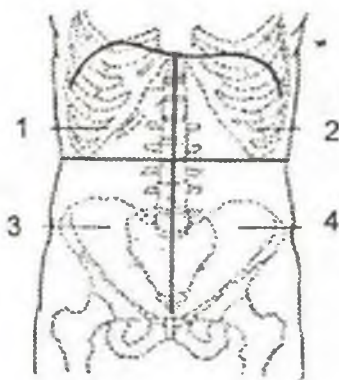


Figure 3-6 Clinical divisions of the abdomen.

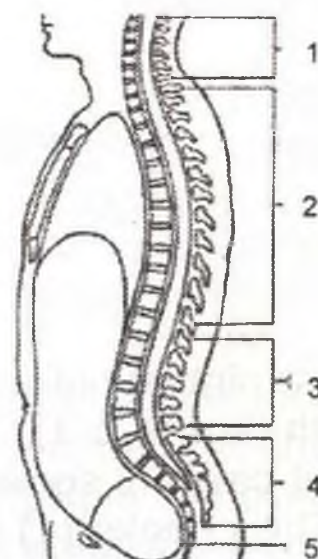


Figure 3-7 Anatomical divisions of the back ( spinal column).



series of bones extending from the neck downward to the tail-bone. Each bone is called a vertebra (plural: vertebrae).

Name the divisions of the back (Figure 3-7) as you study the following:

#### Division

of the Back	Abbreviation	Location
(1) Cervical	C	first 7 vertebrae
(2) Thoracic	Tor D (D=dorsal)	8th to 19th vertebrae
(3) Lumbar	L	20th to 24th vertebrae
(4) Sacral	S	25th-29th bones, which are fused to form the sacral bone, or sacrum
(5) Coccyx		tail bone

An important distinction should be made between the spinal column (the vertebrae) and the spinal cord (nerves running through the column). The former is bone, or osseous tissue, while the latter is composed of nerve tissue.

The spaces between the vertebrae (intervertebral spaces) are identified according to the two vertebrae between which they lie; e.g., L5-S1 lies between the 5th lumbar and the 1st sacral vertebrae.

## **Anatomy of the Digestive System**

### **Oral Cavity**

The gastrointestinal tract begins with the oral cavity, or mouth (figure 6-1).

The oral cavity is sometimes called the buccal (cheek) cavity. The cheeks (1) form the walls of the oval-shaped mouth cavity, while the lips (2) form the opening to this cavity.

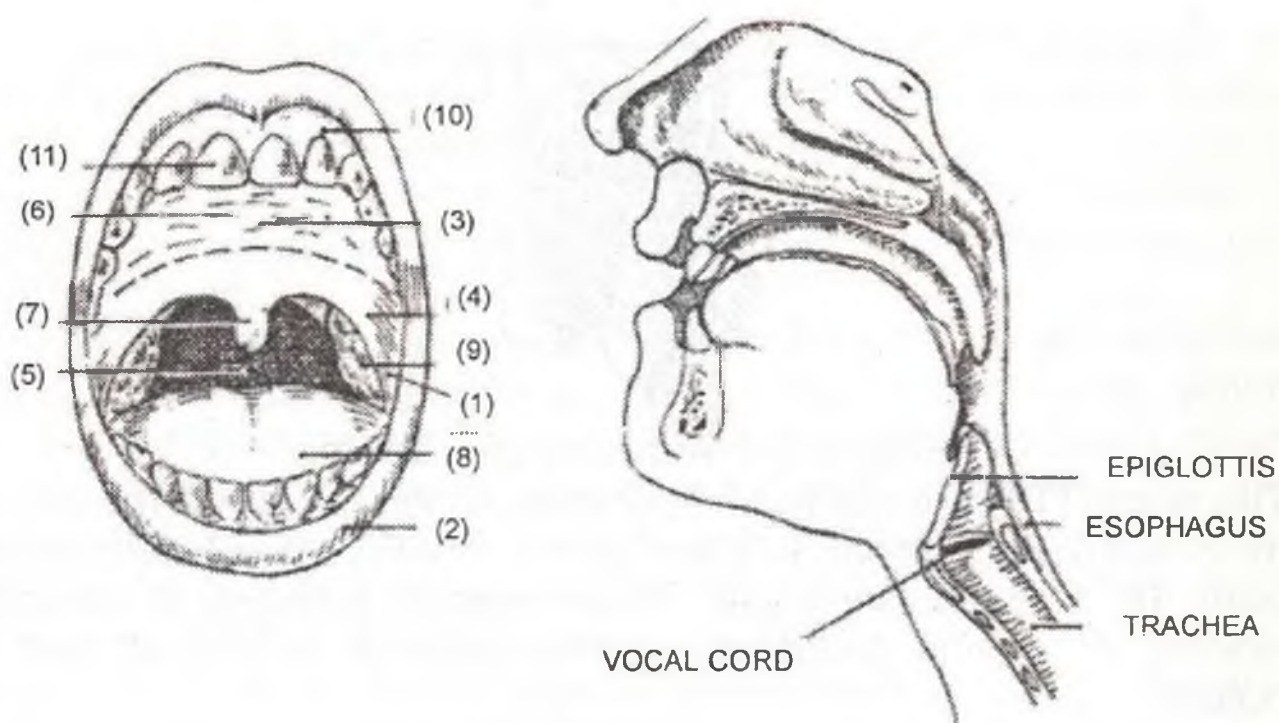


Figure 6-1 Oral cavity and throat.

The hard palate (3) forms the anterior portion of the roof of the mouth while the muscular soft palate (4) lies posterior to it and separates the mouth from the pharynx (throat) (5). Rugae (6) are the irregular ridges in the mucous membrane covering the anterior portion of the hard palate. Hanging from the soft palate is a small, soft tissue called the uvula (7). It is composed of connective tissue and muscle and aids in the production of sounds and speech. (Uvula means little grape.)

The tongue (8) extends across the floor of the oral cavity and is attached to the mandible (lower jaw bone). It moves food around during mastication (chewing) and deglutition (swallowing). The tongue is covered with a series of small projections called papillae which contain cells (taste buds) sensitive to the chemical nature of food.

The tonsils (9) are masses of lymphatic tissue located in depressions of the mucous membranes in the walls of the pharynx. They act as a filter to protect the body from the invasion of microorganisms and produce lymphocytes, which are white blood cells able to fight disease.



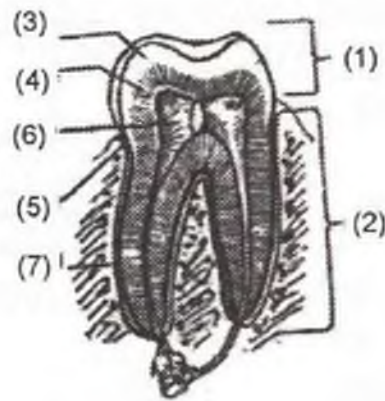


Figure 6-2 Anatomy of a tooth.

The gums (10) are made of fleshy tissue and surround the sockets in which the teeth (11) are found. There are 32 permanent teeth, 16 in each jaw bone. There are: 4 incisors; 2 cuspids (points) or canine (doglike); 4 premolars or bicuspid and 6 molars.

Figure 6-2 shows the inner anatomy of a tooth. A tooth consists of a crown (1), which is above the gum, and a root (2), which is embedded in an alveolus, or tooth socket. The outermost protective layer of the crown is called the enamel (3). The enamel is a dense, hard, white substance - the hardest substance in the body. Underneath the enamel is a layer which extends throughout the crown and root and is the main bulk of the tooth; it is called the dentin (4). Dentin is

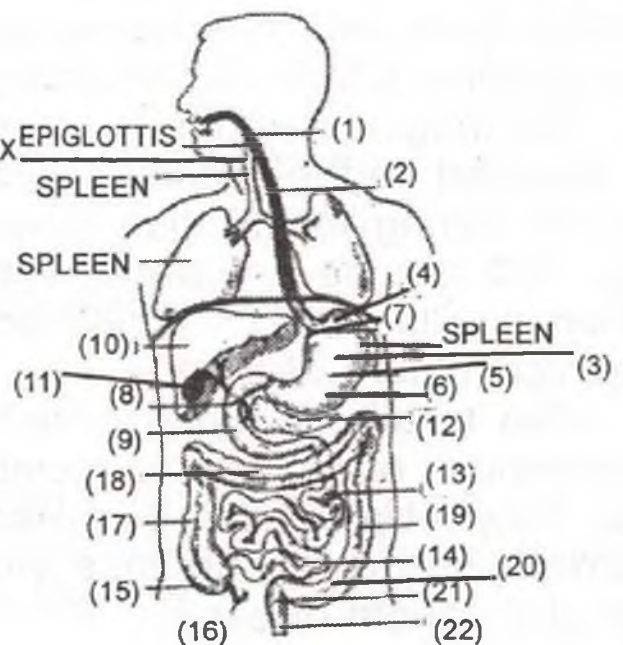
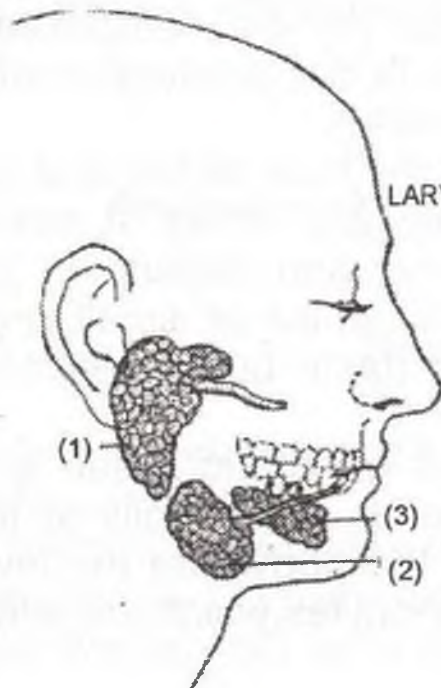


Figure 6-3 Salivary glands      Figure 6-4 The digestive system

composed of bony tissue and is covered by a protective layer of cementum (5). Below the dentin is a soft, vascular layer in the center of the tooth called the pulp (6). Within the pulp are blood vessels, connective tissue, nerve endings and lymph vessels. A periodontal membrane (7) surrounds the root and holds the tooth in place.

The three pairs of salivary glands (in Figure 6-3) are exocrine glands. The salivary glands produce a fluid called saliva which contains important digestive enzymes to chemically break down starches into sugar. Saliva is released from the parotid (near the ear) glands (1), submaxillary (lower jaw) glands (2), and sublingual (under the tongue) glands (3), through narrow ducts which carry the saliva into the mouth.

Figure 6-4 traces the passage of food through the digestive system after it leaves the oral cavity.

## **Cranial bones**

The bones of the skull, or cranium, protect the brain and structures related to it, such as the sense organs. Muscles for controlling head movement and chewing motions are connected to the cranial bones. Sinuses, or air cavities, are located in specific places within the cranial bones to lighten the cranium and warm and moisten air as it passes through.

The cranial bones of a newborn child are not completely joined. There are gaps of unossified tissue in the skull at birth. These are called soft spots, or fontanelles (little fountains). The pulse of blood vessels can be felt under the skin in those areas.

Figure 15-4 illustrates the bones of the cranium:

(1) frontal bone - forms the forehead and bony sockets which contain the eyes

(2) parietal bone - there are two parietal bones which form the roof and upper part of the sides of the cranium



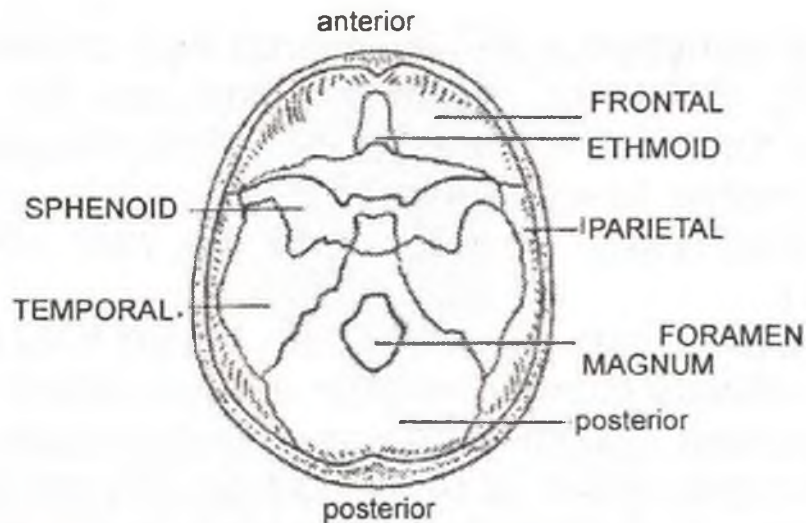


Figure 15-4 Cranial bones, lateral view.

(3) temporal bone - two temporal bones form the lower sides and base of the cranium. Each bone encloses an air and contains a fossa for joining with the mandible (lower jaw bone). The mastoid process is a round behind the ear.

(4) occipital bone - forms the back and base of the skull and joins the parietal and temporal bones, forming a suture (junction line of cranial bones). The interior portion of the occipital bone has an opening called the foramen magnum through which the spinal cord passes.

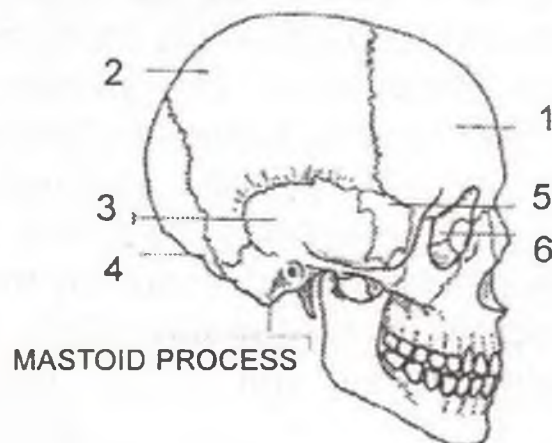


Figure 15-5 Bones of the skull viewed from the floor of the cranial cavity.

(5) sphenoid bone - this delicate bone is composed primarily of spongy cancellous bone. It supports the nasal cavity and forms part of the orbits of the eyes.

Study Figure 15-5 which shows the above-mentioned cranial bones as viewed through the floor of the cranial cavity. Note the foramen magnum.

## Facial Bones

All the facial bones, except one, are joined together by sutures so that they are immovable. The mandible (lower jaw bone) is the only facial bone capable of movement. This ability is necessary for activities such as mastication (chewing) and speaking.

Figure 15-6 shows the facial bones:

(1) nasal bones - two slender nasal bones support the bridge of the nose. They join with the frontal bone superiorly and form part of the nasal septum.

(2) lacrimal bones - two paired lacrimal bones are located one at the corner of each eye. These thin, small bones contain fossae for the lacrimal gland (tear gland) and canals for the passage of the lacrimal duct.

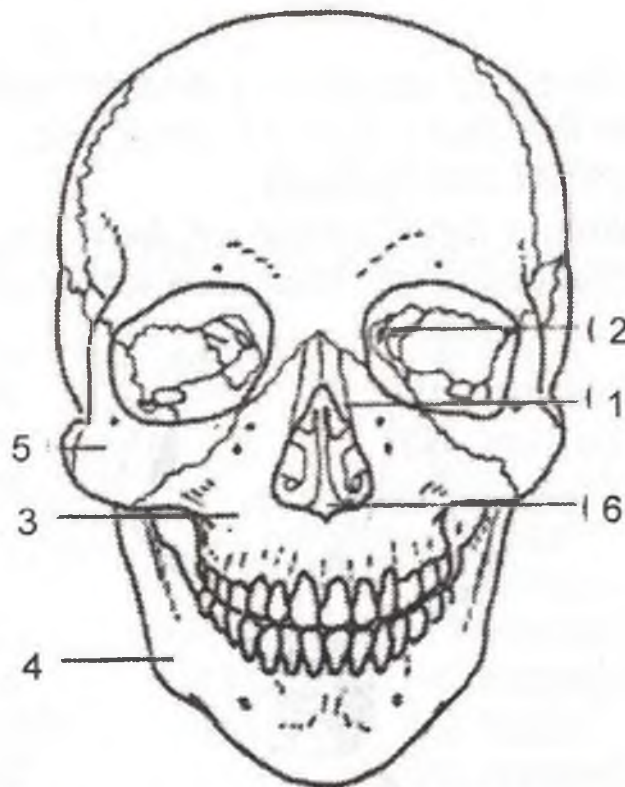


Figure 15-6 Facial bones.

(3) maxillary bones - two large bones compose the massive upper jaw bones (maxillae). They are joined by a suture in the median plane. If the two bones do not come together normally before birth, the condition known as cleft palate results.

(4) mandibular bone - this is the lower jaw bone. Both the



maxilla and mandible contain the sockets called alveoli in which the teeth are embedded.

(5) zygomatic bones - two bones, one on each side of the face, form the high portion of the cheek.

(6) vomer - this thin, single, flat bone forms the lower portion of the nasal septum.

Ex. 6. *Describe the alimentary tract using the following words and word combinations.*

alimentary, mouth, stomach, intestine, small intestine, large intestine, gall-bladder, tongue, food, through, portion, tube, measure, soft and hard palates, membranous, anus, pharynx, esophagus, pancreas, gland, salivary, duodenum, jejunum, ileum, caecum, colon, rectum; to extend, to consist of, to be composed of, to be formed, to pass, to have a capacity, to measure about, to be located, to be about ... meters long, to be in the right (left, upper, low) part of the trunk.

Ex. 7. *Do this exercise at home in a written form.*

*Make a report on the topic. (20-22 sentences).*

1. Anatomy is my favourite subject.
2. Andreas Vesalius is the founder of Anatomy.
3. N.I. Pirogov - the greatest Russian anatomist.



Head: 1 - face;  
 2 - hair;  
 3 - forehead;  
 4 - eye;  
 5 - nose;  
 6 - mouth (lips)  
 7 - chin;  
 8 - cheek;  
 9 - ear;  
 10 - neck;  
 Trunk: 11 - chest;  
 12 - stomach.  
 Limbs: 13 - shoulder;  
 14 - arm;  
 15 - elbow;  
 16 - hand;  
 17 - finger;  
 18 - leg;  
 19 - knee;  
 20 - foot;  
 21 - toe.

### Describe the picture.

This is	a boy	This is (The are)	his trunk
	his head		his chest
	his face		his stomach
	his hair		his limb(s)
	his forehead		his shoulder(s)
	his eye(s)		his arm(s)
	his cheek		his hand(s)
	his ear(s)		his elbow(s)
	his nose		his finger(s)
	his mouth		his leg(s)
	his lip(s)		his knee(s)
	his chin		his foot (feet)
his neck	his toe (s)		



**Lesson Ten.**  
(the tenth lesson)  
**First Steps into Dentistry.**

... continued

Do you know the word «Hygiene»? It takes its name from Hygea - the Greek goddess of Health. Here are some rules of good health.

When you get up air the room. Do morning exercises every day. Take a shower. Clean your teeth carefully. Don't hurry when you have your meal. Work and have a rest eat in time. Go to bed in time and rise early. Remember: «Early to bed, early to rise, makes a man healthy, wealthy and wise.»

**Let's laugh a little.**

«I will not wash my face», said Ann.

«Oh, you are a bad girl,» said the grandmother, «when I was a girl I always washed my face».

«Yes», said Ann, «and now look at it.

**Mouth**

You must keep your mouth, gums and teeth in healthy condition. Brush your gums and teeth twice a day and rinse your mouth after every meal. Don't use metal things to clean your teeth. Examine your teeth regularly. Use food which you can and must chew.

If you want to have healthy and strong teeth you must:

1. Brush your teeth every day.
2. Rinse your teeth after meals.
3. Never crack nuts with your teeth.
4. Not eat much sugar.
5. See the dentist twice a year.

### Active words.

gum  
brush  
rinse  
meal  
chew  
crack

Ex. 1. *Answer the questions.*

1. Do you have healthy teeth?
2. When do you brush your teeth?
3. How often do you see a dentist?
4. Are you afraid of going to the dentist?
5. Why did you decide to become a dentist?

Ex. 2. *Read the answers and finish the questions.*

Dentist: Do you ...?

Patient: No, I don't. I don't rinse my teeth after each meal.

D.: How often do you ...?

P.: I examine my teeth once a year.

D.: Are you ...?

P.: Yes, I am. I am very much afraid of going to the dentist.

D.: Do you ...?

P.: Yes, I do. Sometimes I crack nuts with my teeth.

Ex. 3. Hands. Human hands can do different work. There are some rules do different work.

There are some rules for your hands.

1. Wash your hands before meals.
2. Wash your hands after the use of the toilet.
3. Soap your hands well.
4. Keep your nails short.
5. Don't bite your nails. It is an unsanitary habit.

### Food and Meals.

We take, as a rule, three or four meals a day. The first meal is called breakfast. We have it at about 8 or 9 in the morning. In fact we begin our working day with it. The second meal is



called lunch. We have it in the middle of the day. Those people who work at factories, offices, plants have a break for lunch which they take in dining-halls. At about 4 or 5 in the afternoon people have their dinner.

On Sundays we usually have dinner at 2 or 3 and tea at 4 or 5 o'clock. At about 8 or 9 o'clock we have supper.

Breakfast usually consists of a cup of tea, coffee or milk and bread and butter. Bread and butter are never missing at breakfast. Some people also like porridge for breakfast.

Lunch is usually a cold meal with cold meat, fish and potatoes or vegetables. Then comes coffee or tea with some sandwich.

Dinner is a principal meal. As a rule a cold dish opens the dinner such as, for example, some kind of a vegetable salad. Then comes kind of a soup. Then comes the second course which is usually meat or fish with potatoes or vegetables. Dessert comes to end up the meal. All kinds of fruit make a very good dessert. So at home we usually have dinner of three or four courses.

Most people never have supper because they don't want to eat much before going to bed. If they are hungry late in the evening, they take a small slice of bread and a cup of tea.

### **Meals in England.**

Usually people in England have four meals a day: breakfast, lunch, tea and dinner. Those who work may have breakfast, lunch, dinner and supper. Some people have their dinner late in the evening. As the interval between their lunch and dinner is long they have tea at 5 o'clock. They call it «tea - time» or simply «Five o'clock». They usually have a cup of tea and biscuits. It is rather a light meal. Supper is also a light meal. But some people like heavy meal in the evening. After the supper they usually go for a walk.

English proverb says: «After dinner sleep a while, after supper walk a mile».

### **Ordering a Meal**

- Is this table free, waiter?

- I'm sorry, sir, these two tables have just been reserved by telephone but that one over there's free.

- What a pity! We wanted to be near the dance-floor. Still, it doesn't matter, we'll take it ... The menu, please.

- Here you are, sir.

- Well, let's see. What do you drink, darling?

- Oh, I don't want much to eat, I'm not very hungry ... I think I'll have ox-tail soup and fried plaice with chips.

- Hm, I'm rather hungry. I'll start with some hors-d'oeuvre.

- And to follow?

- A steak with baked potatoes and peas.

- Will you have anything to drink, sir?

- Well, I am rather thirsty. Bring me half a pint of bitter beer.

- What about you, darling?

- Well, I don't care for beer, but I will have a glass of cherry.

- Very good ... What sweet would you like?

- I'll have fruit salad.

- So will I. And we'll have two coffees, please.

- Black or white?

- White, please.

\* \* \*

- Waiter! The bill, please.

- Very good, sir. Here you are. Thank you very much, sir.

Learn the words.

lunch - другий сніданок

biscuit - печиво

light - легкий

The words breakfast, lunch, dinner are used without the article when you mean the time of meal.

- I have dinner at 2 o'clock.

When you mean what you eat the article is used.

- The breakfast is really good.

### **Table Manners.**

1. Make meal time a happy time.

2. Don't let anyone see what you have in your mouth.



3. If food is too hot quickly drink some water.
4. If you took food into your mouth, no matter how you hate it you must swallow it.
5. Never put elbows on the table when you are eating.
6. Don't push back your plate when you finish eating and don't say «I am through».

Remember English proverb:  
«Hope is a good breakfast but a bad supper».

### **Vitamins.**

Vitamins play a very important role in human health. Overdosage of some vitamins may be harmful, so people must take normal doses of vitamins.

Vitamins are present in all kinds of food. It is well known that most vitamins are in fruit and vegetables, milk, meat, eggs and almost any kind of food have also vitamins.

Learn the words.

overdosage - передозування  
as known - відомо

Interesting facts.

You will find

vitamin A to protect eyesight, in:

- carrots
- fish oil
- eggs

vitamin B to strengthen nervous system, in:

- meat
- liver
- eggs
- dried yeast

vitamin C to increase resistance to infection, to help to recover after illness, in:

- cherry
- lemon
- fresh fruit
- vegetables

vitamin D to help in formation of bones and strong teeth,

in:

- milk
- eggs
- fish
- yeast

vitamin E to improve poor blood circulation, to treat the hardened arteries, thrombosis, varicose veins in:

- soya
- fruit

#### Words to remember

to protect - захищати

resistance - опір

yeast - дріжджі

to harden - робити твердим.

### **The Subject of Stomatology (Dentistry)**

Stomatology as a word has its own origine from 2 Greek words: stoma - a mouth and logos - a science so that is a science studying an oral cavity and its diseases.

At present the term stomatology is replaced by the word dentistry, which is more used in scientific literature.

Modern stomatology has developed from dentistry. Dentistry is closely connected with many clinical subjects such as pediatry, inner organ diseases, blood diseases, infectious diseases, skin and venereal diseases and others.

The organs of oral cavity are connected anatomically with the nasal cavity, accessory cavities, visual organs and their diseases influence each other.

The subject of dentistry includes the following branches:

- infant dentistry
- preventive stomatology
- therapeutic dentistry
- surgical dentistry
- orthopedic dentistry.

### **Teeth**

The teeth are in the upper and lower jaws. The teeth are not body structures.



Man has two sets of teeth only. The first set begins to develop when the human baby is three months old. By the time the child is two and a half years old he usually has his first set of teeth - twenty in all. They are known as milk teeth.

The second set of teeth is called the permanent teeth. There are twenty-eight permanent teeth by the time he is thirteen or fourteen.

#### Active words.

- |              |                 |
|--------------|-----------------|
| 1. upper     | - верхній (a)   |
| 2. lower     | - нижній (a)    |
| 3. jaw       | - щелепа (n)    |
| 4. body      | - тіло (n)      |
| 5. structure | - структура (n) |
| 6. set       | - набір (n)     |
| 7. permanent | - постійний (a) |

#### Exercises.

Ex. 1. *Say in English.*

верхняя челюсть; нижняя челюсть; молочные зубы;

Ex. 2. *Insert the necessary prepositions.*

1. The teeth are ... the upper and lower jaws. (on; in)
2. ... the time the child is two he has twenty teeth. (at; by)
3. Man has two sets ... teeth only. (of; at)

#### Some words to the topic.

- |                                   |                       |
|-----------------------------------|-----------------------|
| 1. dentist                        | - зубний лікар        |
| 2. toothache                      | - зубна біль          |
| 3. to be afraid of                | - боятися (чогось)    |
| 4. dental nurse                   | - медсестра в зубному |
| кабинеті                          |                       |
| 5. probe                          | - зонд                |
| 6. dental mirror                  | - зубне люстерко      |
| 7. decayed                        | - зіпсований          |
| 8. to fill                        | - заплombувати (зуб)  |
| 9. temporary                      | - тимчасовий          |
| 10. filling                       | - пломба              |
| 11. your tooth is working loose   | - ваш зуб хитається   |
| 12. to extract                    | - видаляти            |
| 13. to give somebody an injection | - робити ін'єкцію     |
| 14. to rinse                      | - полоскати           |

- |                    |                    |
|--------------------|--------------------|
| 15. to spit out    | - сплюнути         |
| 16. dental forceps | - хірургічні щипці |

### At the Dentist's

Yesterday in the evening I had a bad toothache. I was at home when my mother came.

**Mother:** What's the matter with you?

**Ann:** I have a bad toothache.

**M.:** You must see a dentist.

**A.:** Oh, I am afraid of going to him.

**M.:** But you must go to him or you will feel bad.

In the morning I went to the dentist. The dental nurse let me in.

**A.:** Good morning, doctor.

**Dentist:** Good morning. Sit down, please. What's the matter with you?

**A.:** I have a bad toothache.

**D.:** Open your mouth, please.

The doctor took a probe and a dental mirror and examined my teeth.

**D.:** Have you any pain in this tooth?

**A.:** No, I have not.

**D.:** But it is a decayed tooth and I must fill it. Today I shall put only a temporary filling. But ... oh ... does this tooth hurt you?

**A.:** Yes, it does.

**D.:** Your tooth is working loose. I must extract it. So today I shall extract this tooth and in two or three days I'll put a filling in that one.

**A.:** Oh, doctor, I am afraid. Please don't extract the tooth.

**D.:** Well ... my dear. I'll give you an injection and in ten minutes I'll extract the tooth. You will not feel any pain. Rinse your mouth, please and spit out.

Two minutes passed.

**D.:** Open your mouth. I'll take the dental forceps and in a minute everything will be all right. ... Here is your tooth. Look at it. Are you afraid now?

**A.:** Oh, no, Doctor, thank you.

**D.:** Come to me in three days and I'll put your filling. Good-bye.



## Practice exercises.

Ex. 1. *Answer the questions.*

1. Do you have healthy teeth? 2. How often do you visit a dentist? 3. Do you have many teeth that need curing? 4. Is the polyclinic far or near your house? 5. Are you afraid of going to the dentist?

Ex. 2. *Say in English.*

у мене болить зуб; відкрийте рота; у вас пошкоджений зуб; я заплombую вам зуб (я поставлю вам плombу); прополоскайте рота, будь ласка; тепер сплюньте; я повинен видалити вам зуба; не бійтесь; я зроблю вам ін'єкцію; це тимчасова плomba; цей зуб болить?

Ex. 3. *Learn the following dialogues in pairs.*

1. At Home.

**Mother:** We shall go to the dentist with you today.

**Olga:** Let's go next week, Mummy. There's nothing the matter with my teeth.

**Mother:** Never put off till tomorrow what you can do today!

**Olga:** I don't like to go to dentists. I'm afraid of them.

**Mother:** Nobody likes, and almost everybody is afraid. It's more pleasant to go to the cinema, of course, but still we have to go to the polyclinic. Let the dentist examine your teeth. Rinse your mouth and be ready in a minute.

Mother dressed Olga and they went to the dentist.

2. At the Dentist's.

**Doctor:** What's your name, girl?

**Olga:** My name is Olga.

**Doctor:** Don't be afraid of me, Olga.

**Olga:** I'm not afraid at all.

**Doctor:** That's a brave girl. Now open your mouth. I see all your teeth are healthy, but you don't reach your last teeth when you brush them, they are a bit dirty. Now, it's all over and you can go home. Eat more carrots (морква) your teeth require chewing.

**Olga:** Thank you, doctor. Good-bye.

**Doctor:** Good-bye.

**Find the Ukrainian equivalents in the right coloumn.**

- |                    |                  |
|--------------------|------------------|
| 1. toothache       | 1. пломбувати    |
| 2. to fill         | 2. полоскати     |
| 3. to extract      | 3. щипці         |
| 4. to rinse        | 4. постійні зуби |
| 5. to split out    | 5. молочні зуби  |
| 6. jaw             | 6. видаляти      |
| 7. permanent teeth | 7. полоскати     |
| 8. temporary       | 8. зуб мудрості  |
| 9. forceps         | 9. тимчасовий    |
| 10. decayed        | 10. зубний біль  |
|                    | 11. дзеркало     |
|                    | 12. пошкоджений  |
|                    | 13. сплюнути     |
|                    | 14. хитатися     |
|                    | 15. щелепа       |

**II. Fill in the blanks:**

1. I have a bad ... . 2. He ... of going to a dentist. 3. She has ... in this tooth . 4. The doctor put ... in my tooth. 5. She extracted my teeth .... .

painlessly; be afraid; a temporary; filling; pain;  
toothache

**III. Translate into English.**

Зубний лікар: Що з вами?

Пацієнт: У мене сильно болить зуб.

Зубний лікар: Сідайте, будь ласка. Відкрийте рота.

Пацієнт: У мене болить цей зуб.

Зубний лікар: Сьогодні я зроблю вам тимчасову пломбу.

Приходьте до мене через три дні.

**IV. Make a short situation.**

a bad toothache; be afraid of; dental mirror; decayed tooth; an injection; fill; thank you; go away.



## **Supplementary Texts.**

### **My hobby**

Hobby is usually defined as an interesting occupation for leisure time, not one's regular business. The author of some article I once read has counted 1019 personal interests and ways of spending one's spare time. The most popular hobbies are collecting postage stamps, view cards, coins or books. Some people collect pictures showing the most interesting architectural designs of our time. Others are interested in photography and take their cameras with them wherever they go. A friend of mine took collecting tape records a few years ago. He's got dozens of recordings now, mostly pop-music and jazz concerts. But this hobby has become somewhat too much expensive of late.

The main thing about hobbies is that they enlarge a person's knowledge in some particular field and broaden his outlook. Besides, they serve to kill time with minimal harm to your folks.

As long as I can remember myself I have always been keen on drawing. Even at 4 or 5 I could be sitting hours at a stretch filling my albums with fancy flowers and animals. When I grew older I tried watercolours but somehow I couldn't get accustomed to paints. I preferred colour pencils and grew rather skillful at using them. I've got heaps of drawing and sketches at home, some done at a lesson, others at a party, or on the beach.

Fond of drawing as I am, I've never dreamed of becoming an artist. Even when a small girl I had sense enough to understand that I'd always be an amateur. And it suits me fine. It's wonderful kind of hobby. It removes tension from the mind and rests the soul. When drawing I always feel at peace with the hunger for beauty.

I've never envied people claiming that they manage to combine both their hobby and career. Of course, it's great to find satisfaction and joy in doing one's job. But I'm sure it's very useful to have something different to switch to. It makes one more human, more interesting for others and oneself.

## **My Friend**

I am not a very communicable person, yet there are a few people whom I can call friends. They are more or less close, but Ann is the most intimate of them.

I've known Ann since we both were seven. We are classmates, you know. Yet we became friendly about two years ago. There's certain sameness in our characters that drew us together.

Now Ann's seventeen. She's rather pretty though she herself doesn't think so. Ann is tall and slim, with straight fair hair and a very clear complexion. She's got large greenish eyes with long black lashes, a snub nose and full pale lips. She's not quite excusable at her age.

Ann is a very capable girl and she's been at the top of the class. She's got a brilliant memory, and has never got any trouble with memorizing things. I think Ann has got an analytical sort of mind. She hates disorder and if she wants to understand something, she must understand it thoroughly and completely. This capacity, together with her excellent ear for music, made her a brilliant learner of English. I must confess that I envy her a little for that.

I may sound as if I'm idealizing my friend but I'm not. I'm well aware of Ann's drawbacks. She's a human being, you know. Sometimes Ann seems much too punctual and reasonable for a girl of seventeen. She is absolutely indifferent to poetry and art except music, of course. I wondered once if she should have been born a boy, not a girl.

Anyhow, Ann is a wonderful friend. She is tactful and attentive, always ready to lend a helping hand and always says words at right moments.

I wish we won't lose sight of each other now that school is over and life won't drift us apart.

## **My Flat**

Our families got a flat in a high-rise block of flats in a rapidly developing neighbourhood. We moved into it about a



decade ago. There are three rooms, a kitchen, a bathroom, a toilet, and a hall in our flat. And it has got all the usual modern conveniences: central heating, running hot and cold water, a rubbish chute, to say nothing of electricity and gas. The rooms face south and west which means lots of sunshine. Our flat is on the second floor so that is no trouble when the lift is out of order.

Any flat starts in the hall. Ours is not very spacy, but it has build-in closets and a pantry. There's a coat-rack, an umbrella-stand, a mirror and a chest of drawers with a telephone on it.

The kitchen is planned in such a way as to make good housekeeping easy. There's a refrigerator in one corner and a gas cooker with an oven in another. The sink is built into one of the base units which, together with an oven in another. The bathroom provides a maximum of convenience. It has both a bath and a shower, hot and cold water taps. None of the rooms is very large. There is a coffee table in the middle of the living-room. A wardrobe unit, a book-case, a set of computer, TV-set, HiFi-music system and several pictures on the walls. The parents' bedroom is darker and smaller than the living-room. There is a double-bed with two bed-side tables. There are two bed-room lamps on the walls above the beds.

### **Kyiv**

It is a common knowledge that Kyiv is the capital of Ukraine. Kyiv is one of the largest cities with 3 million inhabitants. Kyiv is the main administrative, political, industrial, scientific centre of the country. Kyiv is situated on both banks of the Dnieper.

The main street of Kyiv is Khreshchatyk. The street is one kilometer long but very impressive. Many offices, administrative buildings, cinemas, restaurants, shops, cafes you can see in this street.

Of all the city's historical monuments the most ancient is the Golden Gate. It is now reconstructed remnants of the ancient watch-tower that guarded the entry into the city and served as a toll-gate. Numerous churches remind the Orthodox Church. Among them one should mention St.

Vladimir's Cathedral, Sophia's Cathedral, St. Andrew's Church and Pecherskaya Lavra which originally was a cave monastery.

In Kyiv there are many educational institutions with hundred thousands of students.

Kyiv is the place which you are to visit.

## **Blood**

In its state blood contains a fluid called plasma plus microscopically visible cellular elements - 1) erythrocytes (red blood cells) of which 4,5 to 5 million are found in each cubic millimetre: the mature erythrocytes are non-nucleated red cells. 2) leucocytes (white blood cells) from 4,000 to 10,000 per cubic millimetre are of different types: leucocytes have nuclei. 3) thrombocytes (blood platelets) are much smaller fragments of protoplasm containing nuclear material. About 400,000 platelets occur per cubic millimetre.

The plasma which is mostly water, also has very complex chemical nature. It contains dissolved doses - oxygen, carbon dioxide, and nitrogen. The proteins include albumin, globulin and fibrinogen. The lipids include lecithin, fats and cholesterol. Carbohydrates are present as glucose, and blood also contains nitrogenous substances and inorganic salts. All these substances are found in varying quantities.

The plasma is the fluid portion before clotting has occurred. The serum is the fluid portion of blood remaining after the coagulation process is completed.

## **Red Blood Cells**

Red blood cells, called also erythrocytes are filled with a solution of a red material known as hemoglobin. They contain no nucleus and have lost the power of reproducing themselves. After an active life of 120 days they are destroyed. Red cells, when placed in solution whose salt concentration is less than that of the haemoglobin, take up water, swell and burst.

## **Vitamins**

Vitamins are special organic substances which are indispensable for the organism. They do not provide energy and are not



plastic materials, but they participate in metabolism as catalysts. They are necessary for the formation of tissue enzymes which influence the transformation of substances in the cells and tissues of the organism. N. Lunin, a Russian doctor, was the first to establish (in 1880) the presence of these substances (later named vitamins) in the food. About 20 vitamins are known today. They are marked by letters A, B, C, D, K, P, etc. The chemical composition and physiological role of most of the vitamins have already been determined. Some vitamins (B and C) are water soluble, while others (A, D, E, K) are soluble only in fats. The daily requirement of vitamins is measured in milligrams and even parts of a milligram.

Fresh, varied food usually contains enough vitamins for the organism. Vitamin A is found in green plants and is necessary for the proper growth of bones, for the nutrition of the cornea of the eye and for the proper functioning of night vision.

Vitamin B is really a complicated group of vitamins, twelve of which have now been identified. Some of these are necessary for growth, for the proper functioning of the nervous system, for the proper formation of the erythrocytes.

Vitamin C is the vitamin which protects the body from the cold and is found in fresh vegetables and in citrus fruits.

Vitamin D prevents rickets, vitamin E deficiency may lead to infertility. Prolonged deficiency of any vitamin results in a disease as avitaminosis. Most avitaminoses are accompanied by reduced working capacity, rapid fatigue, reduced resistance of the organism to infection, incorrect development and retarded growth in children.

Vitamins are widely used for medical purposes, many of them are produced synthetically.

### **Secretion**

Secretion is a process generally brought by an organ called a gland. A gland whether simple or highly complex in structure, may be looked upon as a tube, whose walls are composed of highly specialized epithelial cells, gland cells. The tube is closed at one end. In many glands the other end of the lumen opens up, either directly or by means of a special duct, onto a free surface, such as the skin, the interior of the mouth, the lumen of the intes-

tine, etc. The materials produced by the gland are poured onto this free surface, for which reason the secretion of this type of gland is spoken as an external secretion. The gland is surrounded by a dense network of capillaries.

The distinct process takes place in a gland: the gland cell serves merely as a transfer agency, or it acts as a manufacturing plant or both. In the first instance, certain materials, water and NaCl are taken out of the cell, passed into the duct or lumen, and secreted on a free surface. All types of glands transfer water in this manner. Some glands, e.g. the sweat glands, practically limit their activity to this.

Other glands take certain materials out of the blood stream and chemically transform them into new compounds which together with water and salts are then poured into the duct.

The activity of the gland is normally accompanied by a great dilation of its blood vessels, without this increased flow of blood a gland can't function for any appreciable length of time. Nevertheless in many instances its blood flow in itself is not the direct cause of secretion, for by administering certain drugs (e.g. atropine) it is possible to stop the secretion completely although the flow of blood continues. Secretion by the digestive glands is to be regarded as an active phenomenon, and not merely a passive filtration.

## **The Skin**

The skeleton is covered by the skin, by the layer of subcutaneous tissue, and by the muscles. The skin consists of two layers: an outer layer termed the epidermis, and an inner layer termed the dermis. The epidermis is composed of a number of layers of cells which vary in shape from above downward. The cells in the surface layers are flat. Those in the layers lower down are round or many-sided; the cells in the deeper layers are column-shaped, and possess great vitality and power of reproduction.

The dermis is composed of a mass of loosely connected fibres which can be divided into two layers: 1) An outer layer which is raised into a great number of conical or finger-like projections termed papillae. Each papilla contains blood vessels and nerve endings and also the rudiment of a hair. 2) An



inner layer consisting of bands of connective tissue interlacing with each and permeated by blood vessels, glands and fat.

The skin contains two sets of glands: the sweat glands and the sebaceous glands. The nails and hair are special structures developed from the epidermis.

The functions of the skin are of great importance and are as follows: to enclose contained parts, to act as a protective covering, to contain special nerve endings, which receive and convey the stimuli producing the sense of touch, to excrete certain waste products in the form of perspiration which consists of water with a proportion of mineral matter dissolved in it and a small quantity of carbonic acid.

### **Role of the nervous system**

The nervous system regulates the activities of the different organs and of the entire organism. Muscular contractions, granular secretion, heat action, metabolism and the many other processes continuously operating in the organism are controlled by the nervous system.

The nervous system links the various organs and systems, coordinates all their activities and ensures the integrity of the organism.

The working of each organ or system of organs may be affected by various conditions. A change in the function of one organ or system of organs leads to changes in the functions of other organs and systems. For example, during physical work involving intensive muscular contraction the metabolism in the muscles increases, which consequently increases the requirement in nutrients and oxygen. A reflex response causes the heart and lungs to work more intensively, with the result that the flow of blood to the muscles increases. At the same time heat production and heat losses increase, the excretory organs work harder.

The unity of the organism and its external environment is affected through the nervous system. All the outside stimuli are perceived by the nervous system through the sense organs. In response to the stimuli the functions of the various organs change and the organism adapts itself to its surrounding or, as I.P. Pavlov put it, the organism is equilibrated with the external

environment. This equilibrium forms the basis of the organism's vital activities. A rise in temperature of the surrounding air causes an increased flow of blood to the skin and greater perspiration, which prevents overheating of the organism.

It should be remembered, that unlike animals, man can himself considerably change his external environment. Man's brain is the material basis of thinking and speech. I.P. Pavlov demonstrated that man's so-called psychic activity is based on physiological processes operating in the cerebral cortex.

### **Pain**

There is no adequate stimulus for pain; any form of stimulus evokes pain if it is sufficiently strong. Pain is the most primitive and one of the most important of all sensations. It is generally held that the free nerve endings of small myelinated fibres which do not end in specialized anatomic structures constitute the receptors for pain. They are the most widely distributed receptors in the body, being found in the skin, cornea, blood vessels, and most viscera. The threshold of irritability is high; consequently the stimulations arising in them are of such intensity as to threaten health and life. For this reason they are frequently called nociceptors. They elicit protective and defensive reflexes. Because of their vital importance, the impulses from the nociceptors always take precedence in the reflex activity of the nervous system.

Many internal organs are intensive to what are generally regarded as painful stimuli. Tumours have been removed from the brain of patients, who remained conscious during the entire operation, without causing any pain. Handling, cutting or cauterizing the intestine never gives rise to expressions of pain. However, pain can be elicited from most hollow organs by an increase of the tension of their walls: this is brought about by great distension (e.g. accumulation of gas in the intestine, or the passage of a gall-stone through the bile ducts) or by excessive contraction of their musculature.

Pain can be relieved by reducing the irritability of the nerve fibre at any point along its course, but the sensation is always referred or projected, to the endings of the nerve.

Pain cannot always be definitely localized, especially when it is



severe and of long duration, the sensation then seems to spread to neighbouring parts.

Pain experienced in internal organs is sometimes referred to another and generally, external part of the body. In diseases of some internal organs, certain cutaneous areas may become hyperalgesic (excessively sensitive to pain), so that the least stimulation, such as a soft touch, or even a breath of air, applied to this part of the skin rise to pain.

### **Sense organs**

Sense organs are the structures in the body which are influenced by certain factors of the environment. They are also well-known as receptors. The action of the environmental factor on the body is known as a stimulus. It results in the transmission of a nerve pulse to the nerve centre and from this point may influence appropriate reactions of the body or maybe stored in memory.

Stimuli arise from contacts with solid objects, from chemical compounds, either dissolved or in the gaseous state, from the incidence of light rays, from factors that damage the body.

Tactile corpuscles in surface tissues may be classed as organs of touch. They are sensitive to simple pressure and give rise to images of form through the varying pressures due to uneven and gross contours.

The varied integumentary sense organs of the human body are known to include some sensitivity only to heat, cold or pain. These organs may be free nerve endings found in the skin.

Ears are the centre of the auditory organs. Dissolved substances stimulate organs of taste located in the oral cavity and gases or vapors act on organs of smell.

Sense organs stimulated by light are familiar to us in our own eyes. In contrast with sense organs mentioned above which are classed as exteroceptors, the body contains others called interoceptors. They are the sources of sensations of hunger, thirst, nausea and external pain. Other interoceptors in the muscles, joints and tendons are associated with the maintenance of equilibrium and are classed as proprioceptors. The semicircular canals of the inner ear are also organs of equilibrium.

All sense organs consist of nerve endings associated with various specialized cells and tissues. The nerves are not limited to one type of stimulation but other response may be identical under various stimuli. Thus a mechanical shock to the eye produces a sensation of light. The new fibres leading from the sense organs towards the central system are sensory or afferent.

### **From the History of Medicine in Egypt**

The early Egyptian mythology tells us a very interesting story. Horus, the God of Health, in fight with Set, the demon of evil, lost an eye. The eye was restored to him by the miraculous means. The eye had a sign «R», which meant «Recipe». And the mythology says that word «Recipe» written at the beginning of every prescription was taken from the sign of the eye of Horus.

1. sign - позначка
2. fight - боротися
3. evil - зло
4. to restore - відбудовувати, повертати на попереднє місце
5. miraculous - надзрозумілий
6. to mean - v (meant) мати значення, означати
7. recipe - рецепт
8. mythology - міфологія

### **From the History of Medicine**

The search for health is as old as man's history. In Babylon it was a custom to show the sick in the streets, so that passers-by could say how to treat the sick from their own experience. It was not allowed to pass the sick man in silence.

A papyrus was found dated from 1600 B.C. (B.C. - Before Christ. до нашої ери) about surgery and the treatment of wounds. Then another papyrus was found with about 900 prescriptions, some of these prescriptions doctors use today. People learnt much from Egyptian manuscripts and from embalmed bodies. Examinations of some of these bodies showed many interesting facts. For example, people of those times knew such diseases as rheumatoid arthritis, tuberculosis and appendicitis.



1. search - пошук
2. custom - звичай
3. passer-by - прохожий
4. experience - досвід (життєвий)
5. papyrus - папірус
6. manuscript - манускрипт
7. embalmed - бальзований

### **A Man Who Discovered Chloroform**

Many years ago nobody knew about chloroform. And when the doctor operated on a patient, the patient suffered great pain. A young doctor in Edinburgh could not see how patients suffered during operations and he tried to find some medicine to help the patient to overcome the pain. The doctor's name was James Simpson.

Once he came home from the hospitals with two other doctors. When he was looking for some papers on his desk he saw a little bottle. He remembered that one of his friends had sent him a bottle with chloroform. At that time people knew very little about chloroform.

James Simpson opened the bottle. Chloroform had a strong but not an unpleasant smell. He decided to breathe chloroform in and see a result. The two doctors who were in the room decided to do the same. And so they did. As they breathed in the chloroform they became sleepy and soon they fell into a deep sleep.

After the experiment Dr. Simpson began to use chloroform during his operations. It was a very important discovery. Doctors could operate on the people without hurting them and it was easier for the surgeon to operate because the patients were calm and did not move during the operation.

- |                                     |                    |
|-------------------------------------|--------------------|
| 1. suffer                           | - страждати        |
| 2. to overcome (overcame, overcome) | - перемогти, зняти |
| 3. to look for                      | - шукати           |
| 4. unpleasant                       | - неприємний       |
| 5. smell                            | - запах            |
| 6. to breathe in                    | - вдихнути         |
| 7. discovery                        | - відкриття        |
| 8. to hurt (hurt, hurt)             | - причиняти біль   |

## Hippocrates - the Father of Medicine

(460- 377 B.C.)

Hippocrates was born in Greece. He was the son of a doctor. Hippocrates studied medicine and then went to town where he practiced the art of medicine. It is known that he drove out the plague from Athens by lighting fires in the streets of the city. That is all we know of Hippocrates himself. But we have his writings which are called Hippocratic Collection. The Collection consists of more than one hundred books. Some of Hippocratic thoughts are quite modern. The collection begins with the famous Oath.

Hippocrates was known as an excellent practitioner and a teacher of medicine.

This great physician taught his pupils to examine patients very attentively and to give him quick help. He created medicine on the basis of experience.

Hippocrates freed medicine from superstition. He hated the idea that a disease was the punishment of gods.

Hippocrates paid much attention to diet, gymnastics, massage, sea-bathing in treatment.

He knew how to use many drugs and was also a good surgeon. Hippocrates set fractures and even trephined the skull. Aristotle, the famous philosopher, called him «Hippocrates the Great».

- |                              |                      |
|------------------------------|----------------------|
| 1. B.C.                      | - до нашої ери       |
| 2. to drive out (drove)      | - виганяти           |
| 3. Athens                    | - Афіни              |
| 4. to light v (lit, lighted) | - запалювати         |
| 5. fire                      | - багаття            |
| 6. collection                | - зібрання           |
| 7. to consist (of)           | - складатися (з)     |
| 8. modern                    | - сучасний           |
| 9. Oath                      | - клятва             |
| 10. practitioner             | - практикуючий лікар |
| 11. to create                | - створювати         |
| 12. experience               | - досвід             |
| 13. free v                   | - звільняти          |
| 14. superstition             | - забобон            |



- |                  |                     |
|------------------|---------------------|
| 15. punishment   | - покарання         |
| 16. gymnastics   | - гімнастика        |
| 17. massage      | - масаж, масажувати |
| 18. to set (set) | - відправляти       |
| 19. to trephine  | - робити трепанацію |

### **The Natural History of the Cell**

The cell is the smallest biological unit. Though it is divisible into subcellular particles that retain some of the properties of the original function unit, the cell nevertheless represents a minimum unit of relatively independent activity. It is the smallest portion of the organism that exhibits the range of the properties. We have come to associate it with living material.

### **Biology - the Science of Life**

Biology may be defined as a science of life. The word Biology is derived from the Greek words «Bios» («life») and «Logos» («word» and by extension «study» or «science»). But what do the word science and what life mean? The fact of the matter is that neither of these can be simply defined: the whole course in General Biology attempts to bring about some formal definitions.

### **Science**

« Science is systematic classification of experience».

(G.Irean)

Biology is the study of living organism and soon as man's mind developed to the point where it was conscious of himself as an object from the unmoving and unfeeling ground upon which he stood, a form of biology began. For uncounted centuries, however, biology was not in the form we would recognize as a science. Men were bound to attempt to cure themselves and others of ailments, to try to allay pain, restore health.

Again, man could not help but observe the living machinery of the animal organism, whenever a creature was cut up by butchers for food or by priests for sacrifice. And yet such attention was devoted to detailed features of organs and was not with intent of studying the working but for the purpose of learning

what information they might convey concerning the future. The early anatomists forecast the fate of kings and donations by the shape and appearance of the liver of a ram.

Undoubtedly, much useful informations was gathered over the ages, even under the overpowering influence of superstition. The man who embalmed mummies so skillfully in ancient Egypt had to have working knowledge of human anatomy.

Nevertheless, as long as man believed the universe to be under the absolute dominion of capricious demons, as long as they felt the natural to be subordinate to the supernatural, progress in science had to be glacially slow. The best minds would naturally devote themselves not to the study of the visible world, but to attempts to reach, through inspiration, understanding of the invisible and controlling world beyond.

To be sure, individual man must now and then have rejected this view and concentrated on the study of the world as it was revealed through the senses. These men, however lost and submerged in a hostile culture, left their names unrecorded and the influence unfelt. It was the ancient Greeks who changed that. They were restless people, curious, intelligent, argumentative, and at times, irreverent. About 600 B.C., there arose in Ionia (the coast of what is now Turkey) a series of philosophers who began movement that was to change all that.

The Ionia philosophers ignored the supernatural and supposed, instead, that affairs of the universe followed a fixed and unalterable pattern. They assumed the existence of causality; that is, that every event had a cause, and that a particular cause in a vitably produced a particular effect, with no danger of change by a capricious will. A further assumption was that the «natural law» that governs the universe was of such a kind that the mind of man could encompass it and could deduce it from first principles or from observation.

This point of view dignified the study of the universe. It maintained that man could understand the universe and gave the assurance that the understanding, once gained, would be permanent. Little is known of these early Ionian philosophers: their work is lost. But their names survive and the central core of their teachings as well. Moreover the philosophy of «rationalism» (the belief that the working of the universe could be understood



through reason rather than revelation), which began with them has never died.

Rationalism entered biology when the internal machinery of the animal body came to be studied for its sake, rather than as transmitting devices for divine messages. The most important name to be associated with the rationalistic beginning of biology, however, is that of Hippocrates. Virtually nothing is known about the man himself except that he was born and lived on the island of Cos just off the Ionian coast. On Cos was a temple to Aesclepius, the Greek god of medicine. The temple was the nearest equivalent to today's medical school, and to be accepted as a priest there was the equivalent of obtaining a modern medical degree.

### **The Study of Chemistry**

Chemistry has not progressed so far as physics, for some parts of physics have now become essential sciences rather than descriptive. It is not possible to obtain a sound knowledge of chemistry simply by learning theoretical chemistry. Even if a student were to learn all the chemical theory that is now known, he still would not have a knowledge of the science, because a major part of chemistry, the discussions of the special properties of individual substances, has not yet been well incorporated into chemical theory. Moreover, not many of even the simpler phenomena of chemistry, such as the reaction of hydrogen and oxygen to produce water, are observed by us in our everyday life, as they are the simpler phenomena of physics. Therefore, these chemical facts must be taught in the chemistry course.

There are many reasons for studying chemistry. First, there is the cultural reason. A well-educated man or woman needs to have an understanding of the material world in which he lives as well as of literature and history, and he may find great pleasure in the appreciation of new knowledge as it results from scientific progress. Moreover, science has become a most important part of the modern world; it is now significant for international affairs and politics as well as for industry and scholarly endeavor. Second, there is the practical or professional reason. Chemists and chemical engineers are needed for many activities, although the number of trained chemists and chemical engineers is

increasing rapidly, it lags behind the demand. Also, a good understanding of chemistry is a necessity or a help in the practice of many professions - medicine, engineering, geology, physics, biology, running home.

### **A «Living» Molecule**

Finally, then, the ponds and lakes and seas of the earth were teeming with molecules of an enormous number of kinds, they were a dilute soup of complex molecules. No doubt in some small ponds or puddles the soup was more concentrated than in others.

Among the products of the countless reactions that must have gone on, it is postulated that somewhere, somehow, there appeared a new kind of molecules, a molecule so consmored of its kind from which it was itself first formed.

Such a molecule could have become the ancestor of all subsequent living things. (We shall see later that by mutation - change in structure without loss of ability to duplicate - and aggregation of molecules of this kind, systems of everincreasing complexity might have evolved by processes that are known to exist in organism of today).

Conceivably there was but a single first self-duplicating molecule. More likely there were many, of which only a few, or, perhaps only one, were successful in establishing a continuing line of descent.

This, in the opinion of many biologists and chemists, was the beginning of a billion or so years of organic evolution. To understand in principle how this process of evolution might have occurred, it is desirable to know how self-duplicating molecules are constructed, how they are reproduced, what is the nature of their mutation and what roles they play in the development and functioning of complex life systems. Something of all this we believe, we know, even though there remains a tremendous amount to be discovered.

### **Self-duplication**

Although in any ways evolution may have been a continuous process, the origin of the first successful self-duplicating molecules, was surely a step of very great significance, for it bridges



the gap between inorganic and organic evolution.

Given such a molecule, it is possible to see how, in principle, all forms of life could have evolved by processes about which we now know a small amount.

What manner of molecule could this have been? There is of course no way of being sure. But there is a basis on which we can speculate.

If the course of evolution was anything like that outlined above, we would expect to find descendants to these primitive self-duplicating molecules in organisms that live today. It is tempting to believe that genes are just that. What, then, are genes? They are units of inheritance and as such have been known the geneticist Gregor Mendel deduced their existence from his studies of the results of crossing varieties of the common pea. He called them «factors» rather than genes, but this is minor detail.

Within the past few years geneticists, biochemists, physical chemists and chemists who study molecular structure by means of X-ray diffraction have identified special kinds of molecules that seem to have the properties that one would expect to find in genes. From a purely chemical standpoint this is a remarkable achievement. If its biological implications are what they seem it will almost certainly rank among the greatest advances of modern biology.

### **Nature Control**

Genetics holds a leading position in biology, dealing with such problems as heredity and variability of organisms. Genetics is concerned with plant selection, antibiotic production, man's genetics the cornerstone in the fight for man's health.

### **Health and Longevity**

Not long ago the protein of insulin was synthesized in the test tube. Another recent achievement was the synthesis of a very promising advance not only in solving life's riddles, but in creating new enzymes and tapping new potential of producing food.

Genetics plays an important part in tackling the problem of evolution in the complex of the constant development of new productive forces. To make evolution a controlled process is a

great task that mankind will have to carry out. Such factors as increased radiations, if left uncontrolled. There is no doubt that ways to protect mankind from harmful consequences will be found through genetics.

Furthermore, it has been found that scores of congenital, hereditary diseases like schizophrenia, muscular and skeletal dystrophy, hemophilia and a number of heart conditions originate through changes in the structure and number of chromosomes in the cell nuclei. The past ten years have witnessed the emergence of human cytogenetics - a vast field which associates certain diseases with the structure of the chromosomes. Our knowledge of these diseases now extending to the cell enables physicians to make early diagnoses and provide successful treatment.

Thus the theory of genetics provides a splendid foundation for big advance in medicine.

### **Proteins, Agents of Biological Specificity**

Proteins are of primary importance to the life of the cell. Proteins constitute the major component of the dry weight of an actively growing cell. What is so remarkable about proteins is that they are not only the main building material of the cell, but are also the regulators of all the activities carried out by the living machine. To perform their regulatory function, proteins are endowed with specificity, the ability to distinguish between different molecules. This property, more than any other, is characteristic of the phenomenon of life itself. This specificity of proteins is believed not only to permit the regulation of the multitude of cellular processes but also to be molecular basis of the differences that exist between individuals and between species.

An abiding law of nature is that structure and function are related. Thus we believe that the key to understanding how proteins behave is to know in detail how they are put together. In the last fifteen years outstanding series of developments have added to our knowledge of the structure of proteins. We shall attempt here to give an account of these developments in order to build in the mind of the student a vivid picture of the protein molecule.



## The Indefinite Tenses

	Positive	Negative	Interrogative
P r e s e n t	<p>I work (write).</p> <p>He works (writes).</p> <p>She works (writes).</p> <p>It works (writes).</p> <p>We work (write).</p> <p>You work (write).</p> <p>They work (write).</p>	<p>I do not work (write).</p> <p>He does not work (write).</p> <p>She does not work (write).</p> <p>It does not work (write).</p> <p>We do not work (write).</p> <p>You do not work (write).</p> <p>They do not work (write).</p>	<p>Do I work (write)?</p> <p>Does he work (write)?</p> <p>Does she work (write)?</p> <p>Does it work (write)?</p> <p>Do we work (write)?</p> <p>Do you work (write)?</p> <p>Do they work (write)?</p>
P a s t	<p>I worked (wrote).</p> <p>He worked (wrote).</p> <p>She worked (wrote).</p> <p>It worked (wrote).</p> <p>We worked (wrote).</p> <p>You worked (wrote).</p> <p>They worked (wrote).</p>	<p>I did not work (write).</p> <p>He did not work (write).</p> <p>She did not work (write).</p> <p>It did not work (write).</p> <p>We did not work (write).</p> <p>You did not work (write).</p> <p>They did not work (write).</p>	<p>Did I work (write)?</p> <p>Did he work (write)?</p> <p>Did she work (write)?</p> <p>Did it work (write)?</p> <p>Did we work (write)?</p> <p>Did you work (write)?</p> <p>Did they work (write)?</p>
F u t u r e	<p>I shall work (write).</p> <p>He will work (write).</p> <p>She will work (write).</p> <p>It will work (write).</p> <p>We shall work (write).</p> <p>You will work (write).</p> <p>They will work (write).</p>	<p>I shall not work (write).</p> <p>He will not work (write).</p> <p>She will not work (write).</p> <p>It will not work (write).</p> <p>We shall not work (write).</p> <p>You will not work (write).</p> <p>They will not work (write).</p>	<p>Shall I work (write)?</p> <p>Will he work (write)?</p> <p>Will she work (write)?</p> <p>Will it work (write)?</p> <p>Shall we work (write)?</p> <p>Will you work (write)?</p> <p>Will they work (write)?</p>

**Note.** Для утворення коротких відповідей повторюється те ж допоміжне дієслово, що є у питанні:

"Do you work?" "Yes, I do." "No, I do not (don't)."

"Does he work?" "Yes, he does." "No, he does not (doesn't)."

"Did you work?" "Yes, I did." "No, I did not (didn't)."

"Shall I work?" "Yes, I shall." "No, I shall not (shan't)."

"Will he work?" "Yes, he will." "No, he will not (won't)."



## Загальна таблиця часів Active Voice

Infinitive	Present	Past	Future	Використання
Indefinite to examine	I examine. He examines. I do not examine. He does not examine. Do you examine? Does he examine?	I examined. He examined. I did not examine. He did not examine. Did you (he) examine? Will he ?	I (we) shall He will I shall not examine He will not Shall I ? майбутньому.	Дія звичайна, відбувається взагалі у те перішньому, минулому чи
Continuous to be exam- ining	I am He is You are ] examining I am not Are you ] ?	I was We were I was not You were not ] examin- Was he ing Were you ] ?	I shall be He will be I shall not be exam He will not be ining Shall I be ? Will he be ] ?	Дія відбува ється у певний момент у тепе рішньому, ми нулому чи май бутньому.
Infinitive Perfect to have examined	Present I have He has I have not examined He has not Have you ? Has he ] ?	Past I had He had I had not examined He had not Had I ? Had he ] ?	Future I shall have He will have I shall not have exam He will not have ined Shall I have ? Will you have ] ?	Використання Дія закінчена до певного мо- мента теперіш- нього, минуло го чи майбут- нього часу.
Perfect Continuous to have examining	I have been He has been I have not been exam- He has not been ining been Have I been ? Has he been ] ?	I had been He had been I had not been exam- He had not been ining been Had I been Had he been ]	I shall have been He will have been I shall not have been exam He will not ining have been Shall I have ? Will he have ] ? been	Дія почалась у минулому чи ра- ніше іншої дії і продовжуєть ся у певний мо- мент теперіш- нього, минуло го чи майбут- нього часу, охоплюючи від- різок часу.

### Prepositions:

about	про по	about Moscow about the room	про Москву по кімнаті
above	над	above the table	над столом
across	через	across the road	через дорогу
after	після	after 2 o'clock	після 2 годин
against	проти	against the diseases	проти хвороб
along	вдовж по	along the street along the arm	вдовж вулиці по руці
among	серед (багатьох)	among the students	серед студентів
around	коло, біля по	around the table around the ward	коло стола по палаті
before	перед до	before dinner before 2 o'clock	перед обідом до 2 годин
behind	за (ззаду)	behind the sternum	за (ззаду) грудини
below	нижче	below the liver	нижче печінки
between	між (двома)	between the lungs	між легенями
by	до поруч (з)	by 2 o'clock by the window	до 2 годин поруч з вікн.
down	по вниз	down the arm	вниз по руці
during	протягом у час	during the lecture	протягом (у час) лекції



for	протягом  на для за від	for 2 hours  for 2 days for me for peace for the grippe	протягом 2 годин на 2 дні для мене за мир від грипа
from... to(till)	від...до	from 2 to (till) 4	від 2 до 4
inside	всередині	inside the abdomen	всередині черева
near	біля, коло поруч	near the hos pital	поруч з лі карнею
over	над більше	over the head 60years	над головою більше 60р.
since	з з тогочасу	since 2 o'clock since then	з 2 годин з тогочасу
through	через по	through the ve sels through the sep tum	по судинам  через перего родку
under	під	under the dia phragm	під діафраг мою
up	вгору	up th. lower extremity	вгору пони жній кінцівці
within	у межах	within a year	протягом року
without	без	without the treatment	без лікування

**Таблиця неправильних дієслів**

	I	II	III
be	бути	was were	been
bear	нести; родити	bore	born(e)
beat	бити	beat	beaten
become	ставати	became	become
begin	починати	began	begun
bring	приносити	brought	brought
build	будувати	built	built
buy	купувати	bought	bought
catch	ловити	caught	caught
choose	вибирати	chose	chosen
come	приходити	came	come
cost	коштувати	cost	cost
cut	різати	cut	cut
do	робити	did	done
draw	тягнути	drew	drawn
eat	їсти	ate	eaten
fall	падати	fell	fallen
feed	кормити	fed	fed
feel	почувати	felt	felt
fight	битися	fought	fought
find	знаходити	found	found
get	отримувати	got	got
give	давати	gave	given
go	ходити	went	gone
grow	рости	grew	grown
have	мати	had	had
hear	чути	heard	heard
hold	тримати	held	held
keep	тримати	kept	kept
know	знати	knew	known
lead	вести	led	led
learn	вчитися	learned	learned



	I	II	III
leave	залишати	learnt	learnt
lie	лежати	left	left
lose	губити	lay	lain
make	робити	lost	lost
	примушувати	made	made
mean	означати	meant	meant
	мати на увазі		
meet	зустріти	met	met
pay	платити	paid	paid
put	класти	put	put
read	читати	read	read
ring	дзвонити	rang	rung
rise	вставати, підніматися	rose	risen
run	бігати	ran	run
say	сказати	said	said
see	бачити	saw	seen
send	посилати	sent	sent
show	показувати	showed	showed shown
sit	сидіти	sat	sat
sleep	спати	slept	slept
smell	пахнути	smelled	smelled
		smelt	smelt
speak	говорити	spoke	spoken
spend	тратити	spent	spent
spread	простягатися	spread	spread
take	брати	took	taken
teach	вчити	taught	taught
tell	розказувати	told	fold
think	думати	thought	thought
understand	розуміти	understood	understood
write	писати	wrote	written

## Словник. Умовні скорочення.

### Англійські

a(dj) - adjective	прикметник	дієсл. - дієслово
adv - adverb	прислівник	ел. - електротехніка
cj - conjunction	сполучник	ж. - жіноче ім'я
int - interferon	вигук	ж.р. - жіночий рід
n - noun	іменник	заст. - застаріле слово
num - numeral	числівник	збірн. - у збірному значенні
part - particle	частка	і т. ін. - і таке інше
pl - plural	множина	майб. ч. - майбутній час
p.p. - past participle	дієприкметник минулого часу	мин. ч. - минулий час
predic - predicative	предикативне вживання прикметника	мн.ж. - множина
prep - preposition	прийменник	одн. - одиниця
sing - singular	однина	ос. - особа
v - verb	дієслово	поет. - поетичне слово
		розм. - розмовне слово
		скор. - скорочено
		теп. ч. - теперішній час
		укр. - український
		ч. - чоловіче (ім'я)
		ч.р.; - чоловічий рід

### Українські

амер. - американізм
грам. - граматики

## А

а	<i>неозначений артикль (перед словами, що починаються приголосними і йотованими звуками)</i>	
abbreviation	n	скорочення
able	adj	здібний, здатний
about	adv	близько, коло, поруч
above	adv	1) вгорі, нагорі; 2) вгору
abroad	adv	за кордоном
accurate	adj	точний, правильний
across	adv	1) уперек; 2) на (по) той бік
active	adj	активний, дійовий
actually	adv	насправді, фактично; тепер
ad	скор.	від advertisement
adjective	n	прикметник
administratively	adv	адміністративно
advance	n	рух уперед; успіх, прогрес



adverb	n прислівник
adverbial	adj прислівниковий
advertisement	n оголошення; реклама
advice	n порада
affair	n справа, діло
afford	v мати змогу зробити; дозволити собі
afraid	adj зляканий, сповнений страху
Africa	Африка
after	adv потім; пізніше; prep після; за, згідно з
afternoon	n час після полудня
again	adv знову
against	prep проти; біля; по; об
agreement	n згода; угода; договір
air	n повітря, атмосфера
aircraft	n літак; авіація
all	pron, adj увесь, уся, усе; всякий, будь-який
allow	v дозволяти, давати, допускати
ally	n союзник, спільник; v об'єднуватися
along	prep, adv по, уздовж(по); далі, уперед
also	adv теж, також
alternative	n альтернатива, вибір
always	adv завжди
am	v 1-а особа однини теперішнього часу від be
American	adj американський; американець
among	prep, між, серед
amuse	v бавити, розважати
amusing	adj забавний, смішний
an	неозначений артикль (перед словами, що починаються зголосної)
and	conj і, й, та; а, але, та
angry	adj сердитий; лютий
animal	n тварина; звір; тваринний
another	pron інший; ще один
answer	n відповідь; v відповідати
any	pron якийсь, який-небудь; ніякий, жодний
anybody	pron, n хтось, хто-небудь; ніхто, будь-хто
anyone	див. anybody (хтось, ніхто; будь-хто)
anything	pron щось, нічого, усе, що завгодно
appear	v з'являтися, показуватися

apple	п яблуко
appoint	в призначати, умовлятися
April	п квітень; adj квітневий
are	<i>2-а особа однини і множини теперішнього</i>
<i>часу від be</i>	
area	п площа
argue	в сперечатися; доводити
arise	в виникати, з'являтися
arm	п рука
arose	past від arise (виникати)
around	adv навколо, навкруги
arrive	в приїздити, приходити, наставати
art	п мистецтво
article	п стаття, артикль
as	pron який, що
aside	adv убік, осторонь
ask	в питати, просити
at	prep біля, у; на, при
ate	амер. past від eat
Atlantic	adj атлантичний
attempt	п спроба; замах; в пробувати
attribute	п означення
auto	п скор. від automobile
automobile	п автомобіль
awake	в 1) прокидатися; 2) будити
away	adv геть, далеко
awoke	past і p.p від awake

## В

back	п спина
bad	adj поганий, недоброякісний
badly	adv погано, жахливо
baker	п пекар
bank	п банк
be	в 1) бути, 2) жити
bear	1 п ведмідь; 2 в родити, носити
beast	п звір, тварина
beat	в бити; п удар
beaten	p.p. від beat; adj битий, змучений



beautiful	adj красивий, вродливий
became	past від become
because	conj тому що, бо
become	v ставати, робитися
bed	n ліжко, постіль
bee	n бджола
beef	n яловичина
been	p.p. від be
beer	n пиво
before	prep перед, до; conj раніше
began	past від begin
begin	v починати (ся)
begun	p.p. від begin
behind	prep, adv за, позаду; після
being	n буття, існування
believe	v вірити, думати, вважати
belong	v належати
below	prep, adv під, нижче; внизу; вниз
bend	v згинати(ся), нахилити(ся)
bent	1) схильність, нахил; 2) past і p.p. від bend
Berlin	м. Берлін
beside	prep поруч (з), коло, біля
besides	adv крім того; prep крім
best	adj найкращий
bet	n заклад, парі; v битися об заклад
better	adj кращий, вищий
between	adv, prep між, поміж
bicycle	n велосипед; v їздити на велосипеді
big	adj великий, поважний
bind	v зв'язувати, перев'язувати
birth	n народження
bit	1) past і p.p. від bite 2) n кусок, шматок
bite	v кусати(ся); клювати
bitten	p.p. від bite
black	adj чорний, темний, похмурий
blackish	adj чорнуватий
bleed	v кровоточити; стікати кров'ю
blew	past від blow
blow	v дути; n удар

blown	р.р. від blow
blue	adj синій, блакитний
boat	п човен, шлюпка
Bobby	п розм. полісмен
body	п тіло
bond	п зв'язок
bone	п кістка
book	п книга
boot	п черевик
border	п кордон, край
bore	past від bear
born	adj народжений, природжений
borne	р.р. від bear
both	pron обидва
bought	past і р.р. від buy
bound	п межа, границя
box	п коробка, ящик
boy	п хлопчик, хлопець
bread	п хліб
break	в ламати(ся), розбиватися(ся)
breakfast	п сніданок
breath	п дихання, подув
breed	в виводити, розводити
brick	п цеглина; цегла; в класти цеглу
bridge	п міст; в з'єднувати мостом
bring	в приносити, приводити
Britain	Англія
British	adj британський
broadcast	п радіопередача
broaden	в розширювати(ся)
broke	1) past від break; 2) adj розорений, без грошей
broken	adj переривчастий, уривчастий; р.р. від break
brother	п брат
brought	past і р.р. від bring
brown	adj коричневий; смуглявий
build	в будувати, споруджувати
building	п будинок, будівля
built	past і р.р. від build
bull	п бик



bulldog	n бульдог
burn	v палити, горіти
burned	adj палений
burning	adj гарячий; пекучий
burnt	past і р.р. від burn
burst	v лопати(ся), вибухати
bus	n автобус
bush	n кущ, чагарник
business	n справа, заняття
busy	adj зайнятий; діяльність
but	conj крім, але, проте
buy	v купувати
by	prep при, біля, коло, згідно з

## С

cabinet	n застлана шафа;
call	v гукати, звати
Cambridge	м. Кембрідж
came	past від come
Canada	Канада
cancel	с викреслювати, анулювати
capital	n столиця
car	n автомобіль
cardinal	грам. кількісний числівник
careless	adj недбайливий, безтурботний
case	n випадок; обставина
cast	v кидати, скидати
catch	v ловити; спіймати
cathedral	n собор
cattle	n велика рогата худоба
caught	past і р.р. від catch
central	adj центральний; основний
centre	n центр; середина
certain	adj певний, відомий
chair	n стілець
chairman	n голова (зборів і т. ін.)
change	1) n зміна; 2) v змінювати(ся)
changeable	adj мінливий; несталий
channel	n протока, канал

chatter	в розмовляти, щебетати
check	п контроль, перевірка
chemical	adj хімічний
chess	п шахи
chief	п голова; начальник; adj головний
child	п дитина
childhood	п дитинство
children	pl від child
choose	в вибирати; відбирати
chose	past від choose
chosen	p.p. від choose
church	п церква
cinema	п кіно
circus	п цирк; арена
city	п (велике) місто
clarify	в очищати(ся); робити(ся) прозорим
class	п клас; заняття
clear	adj чистий; ясний; прозорий
clearly	adv чисто; ясно; прозоро
clever	adj розумний, здібний, вправний
climate	п клімат
clock	п годинник
cloth	п тканина; полотно
clothe	в вдягати, вбирати, покривати
clothes	п одяг, убрання; білизна
cloud	п хмара; в хмаритися
club	1 п кий, палиця; 2 клуб
coal	п (кам'яне) вугілля
coast	п узбережжя
coat	п верхній одяг; пальто
cold	adj холодний; байдужий
collection	п колекція; збірник
colour	п колір; фарба
column	п колона; стовп(чик)
come	в приходити; приїжджати
comfortable	adj зручний, комфортабельний
common	adj загальний; спільний
compare	в порівнювати
comparison	п порівняння



competition	п змагання; конкурс
composite	adj складений, складний
compound	adj складений, складний
computer	п комп'ютер, ЕОМ
concert	п концерт
conclusion	п висновок
conditional	adj умовний
conjunction	п з'єднання; зв'язок
connect	в з'єднувати(ся); сполучати(ся)
connection	п зв'язок; сполучення
consider	в розглядати, обдумувати; вважати
consist of	в складатися (з)
consume	в споживати
contain	в містити (в собі)
continuous	adj безперервний; тривалий
cooperation	п співробітництво
copy	п копія, примірник
corn	п зерно; пшениця
corner	п кут, куток
correct	adj правильний, точний
cost	в коштувати; п вартість; ціна
could	past від can
count	в рахувати, гадати
countable	adj грам. обчислюваний (іменник)
country	п країна, батьківщина
countryside	п сільська місцевість
county	п графство; округа (у США)
course	п курс, напрям; курс (лекцій)
cover	в вкривати; ховати
cow	п корова
cream	п вершки; крем
create	в творити, утворювати
Crimea	Крим
cross	1) п хрест; 2) в перитинати
crown	п корона, вінець
cry	в кричати
culture	п культура
cup	п чашка; кубок
cut	в різати; рубати

## D

daily	п щоденна газета; adj щоденний
dance	п танець; v танцювати
dare	v сміти; наважуватися
dark	adj темний
dawn	п світанок, ранкова зоря
day	п день
dead	adj мертвий, неживий
deal	v поводитися, обходитися; п деяка кількість
dealt	past і р.р. від deal
dear	adj дорогий, любий
definite	adj певний, означений
degree	п ступінь; градус
delay	п затримка; зволікання
delight	п захоплення; насолода
demonstrate	v демонструвати
department	п відділ
derive	v одержувати, діставати
destroy	v руйнувати; знищувати
develop	v розвивати(ся)
development	п розвиток
device	п прилад
dialogue	п діалог
dictionary	п словник
did	past від do
die	v умирати
different	adj різний, відмінний
difficult	adj важкий, тяжкий
dig	v копати, рити
dinner	п обід
dirty	adj брудний, нечистий
disarm	v обеззброювати
discharge	v розвантажувати
disjunctive	adj роз'єднувальний
dislike	v не любити, відчувати антипатію
distance	п відстань; дистанція
district	п район, округ
divide	v ділити, чинити



doctor	п лікар, доктор
document	п документ
does	3-я особа однини теп. ч. від do
dog	п собака
done	р.р. від do
door	п двері
doudecker	п двоповерховий автобус
down	adj вниз, внизу
dozen	п дюжина
drag	в тягти(ся); волочити(ся)
dramatic	adj драматичний
drank	past від drink
draw	1. в тягти; 2. в креслити
drawn	р.р. від draw
dream	п сон, мрія; в бачити сон
dreamt	past і р.р. від draw
dress	в вдягати(ся); прикрашати
drew	past від draw
drink	в пити; п напій
driven	р.р. від drive
driver	п шофер, водій
drop	п крапля
drove	past від drive
drunk	р.р. від drink
dry	adj сухий; висохлий
dug	past і р.р. від dig
dwel	в жити, мешкати
dwelt	past і р.р. від dwell

## E

each	adj, pron кожний
ear	п вухо, слух
early	adj ранній; adv рано, завчасно
earth	п земля; земна куля
easily	adv легко, вільно
east	п схід
eastern	adj східний
easy	adj легкий, неважкий
eat	в їсти; п їжа

eaten	p.p. від eat	
eight	num. вісім	
eighteen	num. вісімнадцять	
eighteenth	num. вісімнадцятий	
eighth	num. восьмий	
eightieth	num. вісімдесятий	
eighty	num. вісімдесят	
elect	v обирати; вибирати	
electric	a електричний	
electrical	a електричний	
electromagnet	n електромагніт	
electronic	a електричний	
elegant	a вишуканий; елегантний	
eleven	num. одинадцять	
eleventh	num. одинадцятий	
end	n кінець; край; закінчення	
engine	n машина, двигун	
engineer	n інженер; механік	
England	Англія	
English	a англійський	
enjoy	v зазнавати втіхи (насолюди)	
entertainment	n розвага; вечірка	
envelop	v обгортати	
episode	n епізод	
equivalent	a еквівалентний, рівноцінний	
even	a рівний, гладенький	
evening	n вечір; вечірка	
event	n подія; випадок	
ever	adv коли-небудь, будь-коли	
every	a кожний; усякий	
everybody	pron кожний; усі	
everyone	pron кожний; усі	
everything	pron усе	
everywhere	adv усюди, скрізь	
example	n приклад; зразок	
exercise	n вправа; тренування	
experience	n досвід	
export	v вивозити, експортувати	вивіз, експорт
extract	n витяг (з книги)	
eye	n око	



# F

face	п обличчя
fact	п факт; подія
factory	п фабрика; завод
fall	1. v падати, спускати(ся); 2. п амер. осінь
fallen	р.р від fall
family	п родина, сім'я
famous	adj славетний, відомий
far	adv далеко
farewell	int прощай(те); п прощання
farther	adv далі; більш віддалений
fashion	п мода
fashionable	adj модний
fast	adv міцний, твердий; швидкий
father	п батько
fault	п вада
feature	п риса, ознака
fed	past і р.р. від feed
fee	п плата, гонорар
feed	v харчувати(ся); жити(ся)
feel	v почувати, відчувати
feet	pl від foot
fell	past від fall
felt	past і р.р. від feel
fetch	v сходити і принести (привести)
few	adj мало, небагато
field	п поле
fifteen	num п'ятнадцять
fifteenth	num п'ятнадцятий
fifth	num п'ятий
fiftieth	num п'ятдесятий
fifty	num п'ятдесят
fight	п боротьба; бій
figure	п цифра; фігура; малюнок
film	п плівка; фільм
financial	adj фінансовий
find	v знаходити; виявляти
fine	1.п штраф; v штрафувати; 2. adj чудовий
finish	v кінчати(ся); припиняти(ся); п закінчення, кінець

fire	n вогонь; полум'я
first	num перший
fishery	n рибний промисел
five	num п'ять
flag	n прапор
flame	n полум'я; v палати
flat	1. n квартира; 2. adj плоский, рівний
fleet	n флот, флотилія
flew	past від fly
floor	n підлога; поверх
flow	v текти; лити(ся)
flower	n квітка; цвітіння
flown	p.p. від fly
fluently	adv плавно, вільно (про мову)
fly	1. n муха; 2. v літати, летіти
folk	n народ, люди; adj народний
follow	v іти; наслідувати
following	adj наступний
fond	adj люблячий; ніжний
foot	n нога, ступня
footstep	n слід, хода
for	prep протягом; на; у; до
forbad	past від forbid
forbade	past від forbid
forbid	v забороняти, не дозволяти
forbidden	p.p. від forbid
forecast	v передбачати, завбачати
forehead	n лоб
foreign	adj іноземний
foresaw	past від foresee
foresee	v передбачати
foreseen	p.p. від foresee
forgave	past від forgive
forget	v забувати
forgive	v прощати
forgiven	past від forget
forgot	past від forget
forgotten	p.p. від forget
formally	adv формально



fortieth	num сороковий
forty	num сорок
fought	past і р.р. від fight
found	past і р.р. від find: v закладати, засновувати
fountain	п фонтан; джерело
four	п чотири; четвірка
fourteen	num чотирнадцять
fourteenth	num чотирнадцятий
fourth	num четвертий; п чверть
fourty	num сорок
frankly	adv щиро, відверто
freedom	п свобода, воля
freeze	v морозити; заморожувати
French	а французький; п французька мова
friend	п друг, приятель
friendly	а дружній; приятельський
friendship	п дружба
from	prep від, з, із
front	п фасад, перед; а передній
frosty	а морозний
froze	past від freeze
frozen	р.р. від freeze: а замерзлий
funny	а смішний, втішний
furniture	п меблі, обстановка
further	adv далі; потім; а дальший
future	а майбутній; п майбутнє

## G

gallery	п галерея
garden	п сад
gave	past від give
general	а загальний; звичайний
generator	п техн. генератор
German	а німецький; п німецька мова
gerund	п грам. герундій
get	v діставати, одержувати; добиратися
girl	п дівчинка; дівчина
give	v давати; віддавати; дарувати
given	р.р. від give: adj даний, подарований

glad	adj задоволений, радий, веселий
glass	п скло; скляний посуд; склянка
go	v іти, їхати; від'їжджати
gone	р.р. від go
good	adj добрий, гарний, хороший
goods	п речі, майно, товар
got	past і р.р. від get
gotten	амер. р.р. від get
government	п уряд
graduate	v закінчувати вищий навчальний заклад
grammar	п граматики
great	adj великий, величний; чудовий
Greek	adj грецький; п грецька мова
green	adj зелений; неспілий
grew	past від grow
grow	v рости, збільшуватися
grown	р.р. від grow
guess	v припускати; здогадуватися

## Н

had	past і р.р. від have
hair	п волосся
hall	п зал, передпокій
hammer	п молоток; молот; v забивати
hand	п рука
hang	v вішати, підвішувати
happen	v траплятися, ставатися
happily	adv щасливо; вдало
happiness	п щастя
happy	adj щасливий; вдалий
harbour	п гавань, порт; притулок
hard	adj твердий; жорсткий
hat	п капелюх
hate	п ненависть; v ненавидіти
have	v мати; мусити
he	pron він
head	п голова, людина
healthy	adj чути; слухати, вислуховувати
heard	past і р.р. від hear



heart	n серце; душа
heavily	adv важко
heavy	adj важкий; багатий (про урожай)
held	past і р.р. від hold
help	v допомагати, сприяти
her	pron її, їй; свій
here	adv тут; сюди; ось
hers	pron її; свій
herself	pron 3-я ос. одн. ж. р. себе
hid	past і р.р. від hide
hidden	р.р. від hide
hide	v ховати(ся); переховувати(ся)
high	adj високий
highland	нагір'я; гірська країна
highly	adv дуже, надзвичайно
hill	n горб; пагорб
him	pron його; йому
himself	3-я ос. одн. ч.р. себе
hint	n натяк; v натякати
hip	n стегно
his	pron його; свій
historic	adj історичний
historical	adj історичний
history	n історія
hit	v ударяти; забитися, вдаритися
hobby	n улюблене заняття; хобі
hold	v тримати; держати
hole	n дірка, отвір; яма
holiday	n свято; відпустка
holidays	n канікули
hollow	adj порожній, пустий; нещирий
home	n дім, житло
hometask	n домашнє завдання
homework	n домашня робота
honest	adj чесний, правдивий
hood	n капюшон
hop	v стрибати
hope	n надія; v надіятися (на -for)
hot	adj гарячий, жаркий; палкий

hotel	n готель
hour	n година; час
house	n дім, будинок, хата
how	adv, inter як? яким чином?
however	adv як ви не; conj проте, однак
hundred	num сто, сотня
hundredth	num сотий
hung	past і р.р. від hang
hungry	adj голодний
hurt	v завдавати болю; пошкодити

# I

ice	n лід, крига
idea	n ідея, думка; поняття
if	conj якщо
ill	adj хворий, недужий
important	adj важливий
in	prep у, в, на; за, через
indefinite	adj не визначений; неясний; неозначений
India	Індія
Indian	n індієць
industrial	adj промисловий
industry	n промисловість
infinitive	n інфінітив, неозначена форма дієслова
information	n інформація, повідомлення
inside	n внутрішня частина; prep, adv усередині
instance	n приклад, зразок; вимога
instead of	adv замість
interest	n інтерес; вигода
interjection	n вигук
international	adj міжнародний
interrogative	adj (за)питальний
interval	n проміжок; інтервал
into	prep у, в, до, на
invent	v винаходити; вигадувати
invite	v запрошувати; приваблювати
Ireland	Ірландія
Irish	n ірландський народ; ірландська мова
is	3-я ос. одн. теп. ч. від be



island	п острів
isle	п острів
isn't	скор. від is not
it	pron він; вона; воно
Italian	adj італієць; італійська мова
its	його, її, свій
itself	3-я ос. одн. себе, собі; сам, сама, само

## J

jam	в стискувати; затискувати; п варення
job	п робота, заняття
join	в з'єднувати(ся); приєднувати(ся)
journal	п подорож
jump	в стрибати, скакати
just	adj справедливий; вірний; саме (так)
justify	в виправдовувати

## K

keep	в тримати; зберігати
kept	past і р.р. від keep
key	п ключ; клавіша
kilometer	п амер. кілометр
kilometre	п кілометр
kind	1. п сорт, різновид; 2. adj добрий
kindness	п доброта; доброзичливість
king	п король
kingdom	п королівство
kneel	в ставати навколішки
knelt	past і р.р. від kneel
knew	past від know
knife	п ніж; в різати
knock	в стукати(ся); бити
know	в знати
knowledge	п знання
known	р.р. від know
Kyiv	м. Київ

## L

lag	в відставати; запізнення
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laid	past і р.р. від lay
lain	р.р. від lie
land	п земля, суша; країна
language	п мова
large	adj великий
last	adj останній; минулий; v тривати
late	adj пізній; минулий
lately	adj недавно; останнім часом
laugh	v сміятися; п сміх
law	п закон; право; суд
lawyer	п юрист; адвокат
lay	v класти; накривати
lead	v вести, проводити
leader	п керівник; вождь; лідер
lean	1. adj худий; 2. v нахиляти(ся)
learn	v вчити, вивчати
learnt	past і р.р. від learn
least	adj (найвищий ступінь) найменший
leather	п шкіра, ремінь
leave	v піти, поїхати
lecture	п лекція
led	past і р.р. від lead
left	adj лівий; п лівий бік; past і р.р. від leave
leg	п нога, лапа
legal	adj юридичний, правовий
lend	v позичати; давати
lent	past і р.р. від lend
less	adj (вищий ступінь) менший; менше
lesson	п урок; заняття
lest	conj (в)пускати, випускати
letter	п буква; літера
library	п бібліотека
lie	п брехня; обман; v лежати
life	п життя; існування
lift	v піднімати(ся)
light	п світло; вогонь; adj легкий; незначний
like	v любити; хотіти
likely	adj ймовірний; правдоподібний
link	п (сполучна ланка); зв'язок



liquid	adj рідкий; n рідина
lit	past і р.р. від light
little	adj маленький; незначний
live	v жити; існувати; adj живий
Liverpool	м. Ліверпуль
London	м. Лондон
long	adj довгий; тривалий; v палко бажати
look	v дивитися; глянути
lord	n лорд; пан; володар
lose	v втрачати; губити; пропустити
lost	past і р.р. від lose; втрачений
lot	n жереб; доля
loud	adj голосний
loudly	adj голосно
love	n любов
low	adj низький; невисокий
lunch	n ленч, другий сніданок
lying	pres. р від lie

## M

made	past і р.р. від make
magazine	n журнал
magnify	v збільшувати
mail	n пошта
major	adj більший; важливіший; головний
make	v робити; виробляти
man	n людина; чоловік
Manchester	м. Манчестер
manuscript	n рукопис
many	adj багато, численні
March	n березень; adj березневий
mass	n маса; купа
master	n хазяїн, учитель
match	n змагання; матч
material	adj матеріальний; важливий
math	скор. амер. від mathematics
mathematical	adj математичний
mathematics	n математика
maths	скор. від mathematics

may	v модальне дієслово могли, мати змогу
me	pron мене, мені
meal	n їжа; прийняття їжі
mean	v означати; призначати(ся); мати намір
meet	v зустрічати(ся); збиратися
memorise	v заучувати напам'ять
memory	v пам'ять; спогад
men	pl від man
mention	v згадувати
met	past і р.р. від meet
metal	n метал
metallurgical	adj металургійний
method	n метод; спосіб
metre	n метр; розмір
mice	pl від mouse
middle	n середина
might	past від may; n могутність
mile	n миля
military	adj військовий; воєнний
million	num мільйон
millionth	num мільйонний
mine	1. pron мій; свій; 2. n шахта; рудник
minister	n міністр
minute	n хвилина
mislead	v вводити в оману
misled	v past і р.р. від mislead
mis-spell	робити орфографічні помилки
mis-spelt	past і р.р. від mis-spell
mistake	n помилка
mistaken	р.р. від mistake
mister	n містер; пан
misunderstand	v неправильно розуміти
misunderstood	past і р.р. від understand
mobile	n рухомий, рухливий
mobilize	v мобілізувати(ся)
modal	adj грам модальний
modern	adj сучасний; новий
modifier	n грам визначальник
moment	n момент, мить



monarchy	n монархія
Monday	n понеділок
money	n гроші
month	n місяць
monument	n пам'ятник, монумент
moon	n місяць, місячне світло
more	adj (вищий ступінь), більший; більше
morning	n ранок
morphology	n морфологія
Moscow	m. Москва
most	adj (найвищий ступінь) найбільший
mother	n мати
mouse	n миша
move	v рухати(ся), переїжджати
much	adj багато; дуже; значно
museum	n музей
music	n музика; ноти
musician	n музикант
must	модальне дієслово, що виражає повинність
my	pron мій; свій
myself	pron себе

## N

name	n ім'я; прізвище
narrow	adj вузький; тісний
national	adj народний; національний
native	adj рідний; місцевий
near	adj близький; ближній
necessety	n необхідність; нужда
need	n потреба; нужда
neighbourhood	n сусідство
neither	adj ні той, ні інший
Netherlands	Нідерланди
never	adj ніколи
new	adj новий, свіжий
news	n новина, новини; звістка
newspaper	n газета
next	a наступний, найближчий
nice	a гарний, милий

night	n ніч
nine	num дев'ять
nineteen	num дев'ятнадцять
nineteenth	num дев'ятнадцятий
ninetieth	num дев'яностий
ninety	num дев'яносто
ninth	num дев'ятий
no	1. part ні 2. ніякий, жодний
nobody	pron ніхто
normally	adj як правило, звичайно
north	1. n північ 2. n північний
northern	a північний
not	adv не, ні
nothing	pron ніщо; нічого
noun	n грам. іменник
novel	n роман; новела; a новий
now	adj тепер; відразу
number	n число, кількість
numeral	n цифра; грам. числівник

## О

obey	v слухатися, коритися
object	n предмет, річ; об'єкт
objection	n заперечення
ocean	n океан
of	prep з, через що, від, у
off	prep з, від, за, зі
office	n служба; посада, пост
official	a службовий; офіційний
often	adj часто, неодноразово
oh	int. О! Ох! Ой!
old	a старий
on	prep на, біля, у, в, про, щодо
once	adj одного разу; якось
one	num один; n одиниця; a єдиний
only	adj тільки, виключно
open	a відкритий; вільний
opinion	n думка; погляд
opposition	n опір; протилежність



or	сj або, чи
order	n порядок; v наказувати
ordinal	a порядковий
organize	v організовувати, влаштовувати
other	a ще один, інший; pron інший
ought	v модальне дієслово
our	pron наш, свій
ourselves	pron 1-а особа множини себе
out	adv з, назовні, зовні, геть
outstanding	a видатний
oven	n піч
over	prep над, на, через, коло, по
overcame	past від overcome
overcome	v перемогти, побороти
overhear	v підслуховувати
overheard	past і p.p. від overhear
own	a свій, власний; рідний
ox	n бик, віл
oxen	pl від ox
Oxford	m. Оксфорд

## P

page	n сторінка; v нумерувати сторінки
paid	past і p.p. від pay
painting	n картина; живопис
palace	n палац
paper	n папір; газета; стаття
paragraph	n параграф; абзац
parents	n батьки
Paris	m. Париж
park	n парк; v розбивати парк
parliament	n парламент
parliamentary	a парламентський
part	n частина
party	n партія; a партійний
pass	v проходити, проїжджати
passage	n прохід; проїзд; уривок (з книги)
passive	a пасивний
past	n минуле; a минулий

pay	п плата, в платити
peace	п мир
pen	п перо
pencil	п олівець
people	п народ; нація
perfect	а досконалий; точний; п грам. перфект
permit	п дозвіл; перепустка
person	п особа; персона; людина
perspiration	п піт; потіння
phone	п телефон; п телефонувати
photo	п знімок
phrase	п фраза, вираз, вислів
piano	п рояль, фортепіано
picture	п картина; малюнок
pipe	п труба; трубочка
place	п місце; в розміщати
plague	п чума; лихо
plan	п план; проект; схема
plane	п площина; а плоский
play	в гра, п'еса
pleasant	а приємний; милий
please	в подобатися
plural	п грам. множина; а численний
pocket	п кишеня
poem	п поема; вірш
poet	п поет
point	п крапка; пункт
police	п поліція
policeman	п полісмен, поліцейський
political	а політичний
pony	п поні
poor	а бідний; незаможний
popular	а народний; популярний
population	п населення
possessive	а власницький; грам. присвійний
post	п стовп; пошта; в відсилати поштою
pot	п горщик; казанок
pour	в лити(ся); наливати
power	п сила; міць



practice	п практика; навичка
predicate	в стверджувати
prefer	в віддавати перевагу
preposition	п грам. прийменник
present	а присутній; п теперішній час
pretty	а гарненький; милий; adv досить
prime	п розквіт; а головний
prison	п тюрма; в'язниця
prize	п приз; премія; в оцінювати
problem	п проблема; завдання
professor	п професор
programmer	п програміст
progressive	а прогресивний
promise	п обіцянка; в обіцяти
pronoun	п грам. займенник
proud	а гордий, гордовитий
prove	в доводити; засвідчувати
proven	р.р. від prove
public	п народ; публіка
pupil	п учень; вихованець
put	в (по)класти; (по)ставити

## Q

quarter	п чверть; квартал (міста)
queen	п королева
question	п запитання; питання
quickly	adv швидко
quite	adv зовсім, цілком
quotation	п цитата; цитування

## P

radio	п радіо; в передавати
railway	п залізниця
rain	п дощ
rainy	а дощовий
ran	past від run
rang	past від ring
rather	adv краще, швидше
reach	в діставатися, доїжджати до, прибувати

read	в читати, показувати (про прилад)
reader	п читач; читанка
ready	а готовий; схильний
real	а дійсний, реальний
rebuild	в перебудовувати
rebuilt	past і р.р. від rebuild
receive	в одержувати
recently	adv недавно
recognize	в пізнавати, визнавати
reconstruct	в перебудувати, реконструювати
red	а червоний, рудий
refer	в відкласти
relax	в розслаблювати(ся)
remember	в пам'ятати; пригадувати
remind	в нагадувати
repeat	в повторювати(ся)
report	п доповідь; звіт
republic	п республіка
residence	п місце проживання; резиденція
rest	п спочинок; відпочинок
restaurant	п ресторан
retell	в переказувати
retold	past і р.р. від retell
revolution	п революція
rewrite	в переписувати
rewritten	р.р. від rewrite
rhyme	п рима; в римувати
rich	а багатий, цінний
rid	в звільнятися, рятувати від чогось
ridden	past і р.р. від ride
ride	в їхати верхи
right	а справедливий; правильний; п право
ring	п кільце; в дзвеніти; дзвонити
rise	в сходити
risen	р.р. від rise
river	п річка
riverside	п прибережна смуга
road	п дорога, шлях
rode	past від ride



roof	n дах
room	n кімната; місце
rose	past від rise
rotate	v обертати(ся)
round	a круглий; сферичний
row	n ряд; v гребти
rule	n правило; влада; v керувати, правити
run	p.p. від ring

## S

sad	a сумний
said	past і p.p. від say
sale	n продаж
same	pron той самий, однаковий
sand	n пісок, pl піски
sang	past від sing
sank	past від sink
sat	past і p.p. від sit
Saturday	n субота
save	v рятувати; берегти; заощаджувати
saw	past від see
say	v говорити, сказати
saying	n приказка, прислів'я
school	n школа; навчання
scissors	pl ножиці
Scotland	Шотландія
script	n почерк; сценарій
sea	n море
second	num другий; n секунда
see	v бачити, дивитися
seek	v шукати, розшукувати
seem	v здаватися
seen	p.p. від see
seldom	adv рідко
sell	v продавати, торгувати
send	v посилати, надсилати
sensible	a розумний, розсудливий
sent	past і p.p. від send
sentence	n грам. речення

separate	а окремий, ізолюваний; в відокремлювати(ся)
September	п вересень
serve	в служити; обслуговувати
session	п сесія
set	в ставити, класти; п радіо, телеприймач; набір
seven	num сім
seventeen	num сімнадцять
seventeenth	num сімнадцятий
seventh	num сьомий
seventieth	num сімдесятий
seventy	num сімдесят
shadow	п тінь
shake	в трусити, струшувати
shaken	р.р. від shake
Shakespeare	Шекспір
shall	в допоміжне дієслово
she	pron вона
shine	в світити(ся), блищати; п сяйво, світло
ship	п корабель, судно
shipbuilding	п кораблебудування
shone	past і р.р. від shine
shook	past від shake
shoot	в стріляти
shop	п магазин, крамниця
shopping	п відвідання магазинів, щоб щось купити
short	а короткий, недовгий
shorten	в скорочувати
shot	past і р.р. від shoot; п постріл
should	в <i>допоміжне дієслово для утворення 1-ї особи однини і множини майб. часу в минулому</i>
shoulder	п плече
show	п показ; вистава; в показувати
shown	р.р. від show
shut	в зачиняти(ся), закривати(ся)
side	п бік, сторона
sign	п знак, позначка
signify	в значити, означати
simple	а простий, нескладний
simplify	в спрощувати



simply	adv просто, щиро
since	prep з, після
sing	v співати
singular	a незвичайний, особливий
sink	n раковина; v тонути
sir	n сер, пан
sister	n сестра
sit	v сидіти, засідати
situated	adj розташований, розміщений
six	num шість
sixteen	num шістнадцять
sixteenth	num шістнадцятий
sixth	num шостий
sixtieth	num шістдесятий
sixty	num шістдесят
skin	n шкіра; шкура
sky	n небо, клімат
sleep	n сон; v спати
slept	past і р.р. від sleep
slid	past і р.р. від slide
slide	n ковзання; ковзанка
slow	a повільний, тихий
slowly	adv тихо; повільно
small	a маленький, невеликий
smell	n запах; нюх
smelt	past і р.р. від smell; v плавити
smile	n усмішка; v усміхатися
smooth	a гладенький, рівний
snow	n сніг
so	adv так; настільки, таким чином
sold	past і р.р. від sell
soldier	n солдат; рядовий
some	pron дехто; а якийсь, чкий-небудь; декілька; трохи
somebody	pron хтось, хто-небудь
someone	- somebody
something	pron що-небудь, щось
sometimes	adv іноді, інколи
somewhere	adv десь, де-небудь
son	n син

song	n пісня
soon	adv незабаром, скоро
sorry	adj predic засмучений, жалкуючий
sought	past і р.р. від seek
soul	n душа
south	n південь; а південний
southern	а південний
sign	n знак, позначка
space	n простір; місце
speak	v говорити; розмовляти
speaker	n оратор; доповідач
special	а спеціальний, особливий
speculate	v роздумувати, гадати
speech	n мовлення; промова
speed	n швидкість; v поспішати
spell	v читати слова по буквам; n заклинання
spelt	past і р.р. від spell
spend	v витрачати; проводити (час)
spent	past і р.р. від spend
spill	v проливати; розливати(ся)
spilt	past і р.р. від spill
spin	v прясти; сукати; плести
spite	n злість; недоброзичливість
split	n розколювання; розкол
spoil	v псувати(ся); грабувати
spoilt	past і р.р. від spoil
spoke	past від speak
spoken	р.р. від speak
sponge	n губка
sprang	past від spring
spread	v поширювати(ся)
spring	n весна; v стибати
sprung	past і р.р. від spring
spun	past і р.р. від spin
square	n площа; а прямокутний; квадратний
staff	n штат
stall	n стійло; кіоск
stand	v стояти
standing	а щостоїть



state	п стан, становище; держава
statement	п заява, твердження
station	п місце, пункт; станція
statue	п статуя
status	п статус
stay	в залишатися; п перебування, затримка
steal	в красти
steam	п пара (водяна); в випаровувати
steel	п сталь; в гартувати
stick	п палиця
stiff	а тугий, негнучкий
still	adv спокійно, тихо; а спокійний
sting	п жало, укус; в жалити
stir	в розмішувати; хвилювати
stole	past від steal
stolen	p.p. від steal
stomach	п шлунок; живіт
stone	п камінь; камінний
stood	past і p.p. від stand
stop	п зупинка; затримка
store	п амер. магазин, крамниця
story	п оповідання; повість
stout	а гладкий; міцний
straw	п солома, соломинка
street	п вулиця
strengthen	в зміцнювати(ся)
stretch	п розтягання, витягання
strike	п страйк; в страйкувати
string	п мотузка, шнурок; в зав'язувати, прив'язувати
strive	в старатися, намагатися
striven	p.p. від strive
strove	past від strive
struck	past і p.p. від strike
strung	past і p.p. від string
stuck	past і p.p. від stick
study	п вивчення, навчання; в вчитися
strong	past і p.p. від sting
subject	1. п тема; 2. предмет, дисципліна; грам. підмет
such	pron такий; а такий

suggest	v пропонувати; наводити на думку
summer	n літо
sun	n сонце; v гріти(ся) на сонці
sunburn	n загар
sunburned	past і р.р. від sunburn
sunburnt	a загорілий
Sunday	n неділя
sung	р.р. від sing
sunk	р.р. від sink
supper	n вечеря
supplementary	a додатковий
suppose	v гадати; вважати
sure	a 1) predic упевнений; 2) безперечний
surprise	n здивування; несподіванка
sweep	n вимітання, підмітання
swept	past і р.р. від sweep
swim	n плавання, пливти
swing	n гойдання, коливання; v гойдати(ся)
switch	v вмикати; n вмикач
swung	past і р.р. від swing
system	n система; метод

## Т

table	n стіл; дошка; плита
take	v брати, взяти; оволодівати
taken	р.р. від take
talk	n розмова; чутка; pl переговори
tall	a високий
tank	n бак, водоймище
tape-recorder	n магнітофон
task	n завдання; урок; задача
taught	past і р.р. від teach
tax	n податок; v обкладати податком
taxi	n таксі
tea	n чай
teach	v учити, навчати
teacher	n учитель
teaching	n навчання; учення
tear	v рвати(ся), розривати(ся)



telegraph	n телеграф
telephone	n телефон; v телефонувати
tell	v розповідати; говорити
temper	n стримувати; n характер
temperature	n температура
ten	num десять
tense	n граматичний час; а натягнутий; напружений
tenth	num десятий
terrible	а жахливий
territory	n територія
text	n текст
textile	а текстильний
Thames	p. Темза
than	cj ніж, за, від
thank	v дякувати
that	pron той; який
the	означений артикль
theatre	n театр
their	pron їх, їхній; свій
theirs	pron їх, їхній, свій
them	pron їх, їм
themselves	pron себе
then	adv тоді; потім; n той час
there	adv там; туди
these	pl від this
they	pron вони
thing	n річ, предмет; справа
think	v думати, обмірковувати
third	num третій
thirsty	а спраглий
thirteen	num тринадцять
thirteenth	num тринадцятий
thirtieth	num тридцятий
thirty	num тридцять
this	pron цей
those	pi від that
thought	n думка; мислення; past і p.p. від think
thousand	num, n тисяча
thousandth	num тисячний

three	num три
threw	past від throw
through	prep через, крізь; adv наскрізь
throughout	adv у всіх відношеннях; усюди
throw	v кидати; закидати; n кидання; кидок
thrown	p.p. від throw
ticket	n квиток
tie	v зав'язувати; зв'язувати; n краватка
till	prep до; cї доти, поки
time	n час; епоха
tired	predic втомлений
tiresome	a стомлений; нудний
to	prep у; до, в, на
today	adv сьогодні; у наш час
together	adv разом, укупі
told	past і p.p. від tell
tomb	n могила; надгробний пам'ятник
tomorrow	adv завтра
too	adv надто; також, теж; крім того
took	past від take
tooth	n зуб
top	n верхівка, вершина; a верхній
topic	n предмет, тема
tore	past від tear
torn	p.p. від tear
toward	у напрямі до
tower	n башта; вишка
town	n місто
train	n поїзд
tram	n трамвай
translate	v перекладати
transport	v перевозити
travel	v мандрувати, подорожувати
tree	n дерево
tremble	v тремтіти
triumph	n тріумф; v радіти
trot	v бігти риссю; n рись
trouble	n неспокій; біда
trousers	n pl штани; брюки



true	а вірний, правильний
truth	п правда; істина
try	в намагатися, старатися
tube	п труба; метро
turn	в повертати(ся); вертіти(ся)
twelfth	num дванадцятий
twelve	num дванадцять
twentieth	num двадцятий
twenty	num двадцять
two	num два
tying	pres. р від tie
typewriter	п друкарська машинка

## U

Ukrainian	а український; п українець
umbrella	п зонт(ик), парасолька
uncle	п дядько
uncomfortable	а незручний
uncountable	а необчислюваний
under	prep під, нижче
undergo	в зазнавати, переносити
undergone	р.р. від undergo
underground	п метро
understand	в розуміти; мати на увазі
understood	past і р.р. від understand
undertake	в починати, братися
undertaken	р.р. від undertake
underwent	past від undergo
undid	past від undo
undo	в розв'язувати, розстібати
undone	р.р. від undo
unemployed	adj безробітний
unfortunately	adv на жаль
union	п союз; об'єднання
unit	п одиниця; одиниця виміру
unite	в сполучати(ся); об'єднувати(ся)
university	п університет
unless	сј якщо не
unlikely	а неймовірний; неправдоподібний

unload	в розвантажувати; вивантажувати
untie	в розв'язувати
up	adv вгорі; вгору, вище
upon	prep на, у, в, про, з
upset	в перекидати(ся), перевертати(ся)
us	pron нас, нам
use	п уживання; застосування
used	а уживаний
useful	а корисний, придатний
useless	а некорисний, непотрібний
usual	а звичайний
usually	adv звичайно

## V

vain	а марний, даремний
valid	adj дійсний, діючий
value	в оцінювати
valve	п клапан
variety	п різноманітність
various	adj різноманітний
vascular	adj судинний
vase	п ваза
vegetable	п овоч
verb	п дієслово
very	adv дуже, а той самий
vessel	п судина
view	п вид; вигляд
visit	п відвідування
vision	п зір
visual	adj зоровий
visitor	п відвідувач
vivid	adj яскравий, жвавий, палкий
vocabulary	п словник, запас слів
vocation	п відпустка, канікули
voice	п голос; в виражати, передавати

## W

wait	в чекати
wake	в прокидатися; будити



Wales	Уельс
walk	<i>п ходьба; прогулянка пішки; в ходити, іти пішки; прогулюватися</i>
wall	п стіна
wander	в блукати; мандрувати
want	в хотіти, бажати; п нестача; відсутність
war	п війна
was	past sing від be
wash	п миття; умивання; в мити(ся)
watch	п годинник; п спостереження; в спостерігати
water	п вода; в поливати, зрошувати
watt	п ел. ват
way	п дорога, шлях
we	pron ми
wear	в носити, зношувати; п носіння
weather	п погода; в витримувати
Wednesday	п середа
week	п тиждень
weekly	а щотижневий; п тижневик
weep	в плакати
well	п колодязь; криниця; в піднімати(ся); adv добре
Welsh	уельський
went	past від go
wept	past і р.р. від weep
were	past pl від be
west	п захід; а західний
Westminster	Вестмінстер
wet	а мокрий, вологий; в мочити, зволожувати
what	pron що, хто, який, скільки
wheel	п колесо; штурвал
when	adv коли; сј коли; у той час, як
where	adv де, куди
which	pron, сј який, котрий, що
whisper	п шепіт; в говорити пошепки; шепотіти
white	а білий
who	хто, хто такий; який
whole	а весь, цілий
whom	pron кого, кому; якого, якому
whose	pron чий

why	adv чому; int адже ж; тож; але ж
wide	а широкий; adv широко
widen	в розширяти(ся), поширювати(ся)
wife	п дружина, жінка
will	п сила волі; воля; бажання; допоміжне дієслово для утворення майбутнього часу 2-ї 3-ї особи однини і множини
win	в вигравати, перемагати
wind	п вітер
window	п вікно
winter	п зима
wireless	п радіо; радіоприймач
wisdom	п мудрість
wise	а мудрий
wish	п бажання; в бажати, хотіти
with	prep з, за
withdraw	в відводити
withdrawn	р.р. від withdraw
withdrew	past від withdraw
within	prep в, у межах
without	prep без
wives	pl від wife
woke	past і р.р. від wake
woken	р.р. від wake
wolf	п вовк; в пожирати
wolves	pl від wolf
woman	п жінка
won	past і р.р. від win
wood	п ліс, гай
word	п слово
wore	past від wear
work	п робота, праця, труд
worker	п робітник; працівник
working	а працюючий; робочий
works	п майстерня
world	п світ, всесвіт
worn	р.р. від wear
worse	а гірший; adv гірше
worst	а гірший; adv найгірший



would	допоміжне дієслово для утворення 2-ї і 3-ї особи майбутнього часу в минулому
write	v писати
writer	n письменник
written	p.p. від write
wrote	past від write

## Y

yard	n ярд; двір
year	n рік
yellow	a жовтий, n жовтий колір
yes	part так
yesterday	adv учора
you	pron ви, ти
young	a молодий, новий
your	pron ваш, твій, свій
yourselves	pron самі

## Z

zero	n нуль
zink	n цинк
zipper	n «блискавка», застібка
zoo	n зоопарк
zoology	n зоологія

# PART TWO



## ПЕРЕДМОВА

**Мета підручника.** Підручник розрахований на студентів стоматологічного факультету II-III рівня навчання, магістрів та аспірантів, котрі продовжують вивчення англійської мови у вузі, тому головне завдання полягає в підготовці студентів до самостійного читання та розуміння оригінального медичного тексту зі словником.

Відповідно до програми навичка усного мовлення розвивається в межах вивченої тематики. Тексти підручника відповідають тематиці, котру студенти вивчають з основних стоматологічних дисциплін.

Підручник розрахований на практичні аудиторські заняття та самостійну роботу студентів з оригінальними додатковими текстами для читання.

**Підручник складається з:** 1— чотирьох тематичних циклів; 2 — короткого довідника з правил читання та словотворення; короткого граматичного довідника; 3 — англо-українсько-російського словника.

**Тематичні цикли підручника:** I. Анатомія. II. Стоматологічне обслуговування населення. III. Основна частина: терапевтична стоматологія, основи хірургічної стоматології, основи ортопедичної стоматології та ортодонтії, запобігання стоматологічним захворюванням та гігієна ротової порожнини. IV. Тексти для додаткового читання.

**Структура циклу.** Кожний цикл складається з кількох Units, до яких входять різні розділи стоматології. Залежно від тематики, обсягу незнайомої лексики кількість Units у циклові варіюється. Unit поділений на 7 уроків, з яких 6 містять матеріали для самостійної підготовки студентів удома та матеріал для аудиторної роботи, а також оглядове заняття для самостійної роботи в аудиторії.

# CYCLE I. DENTAL ANATOMY

## UNIT I. STRUCTURE OF THE TEETH

**Словотворення:** словоскладання, конверсія, афіксація, іменник як означення.

**Граматика:** речення, головні члени речення.

### INTRODUCTORY PART

#### LESSON 1

##### Class Assignments

##### I. *Learn these speech patterns:*

It wasn't until 1840 that practicing dentists had any formal education. — Лише в 1840 році стоматологи-практики почали одержувати спеціальну освіту.

**Exercise 1.** *Make up sentences using the table and translate them:*

It wasn't until	1872 that the first electric foot drill was developed.
	1877 that the hydraulic chair was invented.
	1895 that Wilhelm Roentgen discovered the X-ray.

2. With the use of anesthetics the environment for the patient began to improve. — Із застосуванням анестетиків обслуговування пацієнта стало кращим.

**Exercise 2.** *Make up sentences using the table and translate them:*

With the discovery of X-ray		dentists moved into the science and technologies.
With the advent of modern techniques		
With the advances of dental science		



II. Read the text and translate it with the help of the dictionary.

## AN ABBREVIATED HISTORY OF DENTISTRY

Dentistry's evolution has taken place over any centuries. Egyptian medical writings from the sixth century B.C.<sup>1</sup> contain prescriptions for toothaches and the swelling of gums. *Clay tablets*<sup>2</sup> from the fourth century B.C. tell of physicians in Asia Minor advising tooth extraction as a cure for certain diseases.

Yet throughout dentistry's long history, it wasn't until 1840 when the Baltimore College of Dental Surgery opened for the training of dentists, the first such college in the world, that practicing dentists had any formal education.

Early dental equipment was crude when compared with today's standards. But when the hydraulic chair was invented in 1877, with the development of the first electric tooth drill in 1872, and later, when anesthetics were used that could deaden the area of operation while the patient remained conscious *the environment for the patient began to improve*<sup>3</sup>.

With Wilhelm Roentgen's 1895 discovery of the *X-ray*<sup>4</sup> and the advent of modern dental techniques, dentists moved into the twentieth century's expanding world of science and technology. Since 1950 the advances in dental science have grown exponentially.

### Notes

<sup>1</sup> **B.C.** — до нашої ери.

<sup>2</sup> **clay tablets** — глиняні таблички.

<sup>3</sup> **the environment for the patient began to improve** — обслуговування пацієнта стало кращим.

<sup>4</sup> **X-ray** — рентген.

III. Exercise 3. Find in the text English equivalents for these words and word combinations.

1. розвиток стоматології. 2. містити опис зубного болю. 3. видалення зуба як лікування деяких захворювань. 4. крізь довгу історію стоматології. 5. стоматологічна освіта була примітивною. 6. порівняно з ... 7. ділянка операції. 8. зали-

шатися при свідомості. 9. розроблення сучасних стома-  
тологічних технологій.

**Exercise 4.** *Quote the sentences in which the following words and word combinations are used in the text.*

Over many centuries, tell, formal education, early dental equipment, to be used, to move, since.

**Exercise 5.** *Answer these questions.*

1. How long has dentistry evolution taken place? 2. What do Egyptian medical writings contain? 3. Clay tablets tell of physicians advising tooth extraction as cure for certain diseases, don't they? 4. When was the first dental college opened? 5. Did practicing dentists have any formal education before 1840? 6. What can you say about early dental equipment? 7. What was invented in 1877? 8. The first electric foot drill was developed in 1872, wasn't it? 9. When did W.Roentgen discover the X-ray? 10. Since when have the advances in dental science grown exponentially?

**Exercise 6.** *Say whether it's true or false.*

1. Clay tablets contain prescriptions for toothaches and the swelling of gums. 2. Throughout dentistry's history practicing dentists had some formal education. 3. Early dental equipment was perfect. 4. When the hydraulic chair was invented the environment for the patient began to improve. 5. Since 1950 the advances in dental science have grown exponentially.

**Exercise 7.** *Give a summary of the text «An Abbreviated History of Dentistry».*

**Exercise 8.** *Read the text «A Bright Future», make the plan and discuss it.*

## **A BRIGHT FUTURE**

Today dentists promote oral health by teaching their patients preventive dentistry, such as proper brushing and flossing techniques to avoid cavities and unhealthy gums.

Dentists must have a wide range of knowledge and skills to



perform not only diverse dental treatments but to fill various daily roles such as office manager, patient counselor, and community leader.

Traditionally, many people avoided visits to dentists and physicians unless they were in pain. As a result, their physical and oral health suffered. Because of today's modern technology, more people are seeking the dentist's services. Children usually have their first dental checkup before the age of three, and the elderly are retaining their teeth and needing lifelong dental care.

Many people visit the dentist for purely aesthetic reasons. One person may wish to have a dark tooth match their other teeth. Another person may want a gap between their front teeth closed.

Today's dentist works closely with other health professionals in sophisticated facilities. With a concern for a person's complete health, dentists may even discuss stress and diet as means of improving the patient's oral health.

The future of dentistry is bright. More and more women are entering dentistry. About half the dentists in Europe are women.

The dentist of tomorrow will be a scientist and a leader in order to meet the new treatment needs of society. Health care professions offer rewarding careers with personal and professional satisfaction.

## LESSON 2

### Home Assignments

1. Зверніть увагу на способи творення нових слів і дайте відповіді на запитання (див. граматичний довідник стор. 487).

Як утворені подані слова? З яких елементів вони складаються? Як наголошуються складні слова?

toothache [ˈtu:θeɪk] — зубний біль; textbook [ˈtekstbʊk] — підручник.

1) Define the structure of compound words and translate them:

notebook, birthday, homework, headache, newspaper

2. Від яких слів утворені ці слова:

reader [ˈriːdər] — читач; to re-read [riˈriːd] — перечитувати;  
to name [neɪm] — називати; to rename [riˈneɪm] — давати

нове ім'я, перейменувати.

Як утворилися ці слова і як вони наголошуються?

2) *Translate the words:*

writer, lecturer, helper, examiner, teacher, to replace, to remove, to redo.

3) *Translate the words and say what part of speech they belong to:*

to name — a name, to help — the help, to act — the act, to pass — a pass.

3. Яку назву має це явище?

4) *Form nouns from the following verbs with the help of conversion and translate them:*

a group, a place, a head, a form, an end, a line, a drill.

4. Як перекладається перший з двох поспіль іменників? Яка синтаксична його властивість у реченні?

summer holiday, spring session, root canal, enamel prisms, blood vessel, repair process, root apex.

### **Remember:**

За допомогою суфікса **-ly** утворюються прислівники від основи іменників і прикметників: quick — швидкий, **quickly** — швидко; day — день, **daily** — щоденно.

5) *Define from which words these adverbs are formed and translate them:*

normally, intensely, badly, really, purely, roughly, fully, obliquely.

За допомогою суфіксів **-ic, -al** утворюються прикметники від основ іменників: base — основа, basic — основний; part — частина, partial — частковий.

6) *Translate:*

experimental, periodontal, interprismatic, microscopic, practical.

## **II. Порядок слів у англійському реченні.**

1. Побудова розповідних і питальних речень (див. граматичний довідник, стор. 500).

7) *Name the following parts of the sentences and answer the questions:*



The teacher asks the student at the lesson.  
The student asks the teacher at the lesson.

- 1). Яка різниця між цими двома реченнями? Чи впливає порядок слів на зміст англійського речення?  
2). Яке місце посідає підмет? Присудок? Додаток? Обставина?

8) In the following sentences name the parts of the sentence and write them down in the table:

1. Every tooth consists of a crown and one or more roots.
2. The crown is the part visible in the mouth.
3. Unlike most other body tissues it cannot undergo repair.

1	2	3	4
Підмет (його визначення)	Присудок	Додаток	Обставина
Хто?	Що робить підмет?	Кого? Що?	Де? Коли?

III. 1. Remember the reading of the words and translate them:

crown	[kraun]	cementum	[si'mentəm]
root	[ru:t]	pulp	[pʌlp]
jaw	[dʒɔ:]	fissure	[fɪʃə]
apex	[ˈeɪpeks]	cuspid	[kʌsp]
enamel	[ɪ'næməl]	process	[ˈprouses]
dentine	[ˈdenti:n]		

2. Translate and learn the following words and word combinations:

angle	[æŋɡl]	layer	[leɪə]
to be attached	[ə'tætʃt]	occur	[ə'kə:]
bone	[bəʊn]	repair	[rɪ'peə]

bundle	[bʌndl]	rod	[rɒd]
to be called	[ˈkɔːld]	sensitive	[ˈsensitiv]
to cause	[kɔːz]	socket	[ˈsɒkit]
chamber	[ˈtʃembə]	soft	[sɒft]
to cover	[ˈkʌvə]	surface	[ˈsəːfis]
decay	[diˈkei]	tube	[tjuːb]
foramen	[fəˈreimen]	undergo	[ˈʌndəɡou]
hard	[hɑːd]	unlike	[ʌnˈlaik]
hidden	[ˈhidn]	vessel	[ˈvesl]
injury	[ˈɪndʒəri]	visible	[ˈvɪzibl]
junction	[ˈdʒʌŋkʃn]		

IV. 1. Read the text and translate it. Write out:

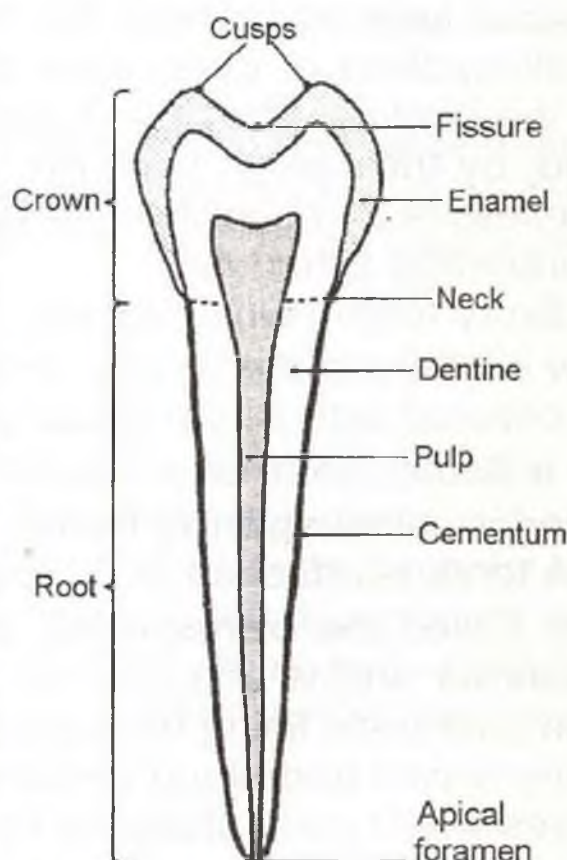
- adjectives with the suffixes **-ic**, **-al**;
- adverbs with the suffix **-ly**;
- word combinations consisting of two nouns where one is used as an adjective and translate them:

## STRUCTURE OF THE TEETH

Every tooth consists of a **crown**, a **neck** and one or more **roots**. The crown is the part visible in the mouth and the root is the part hidden inside the jaw. The junction of crown and root is called the **neck** and the end of the root is called the **apex**. Every tooth is composed of enamel, dentine, cementum and pulp.

### Enamel

This is the outer covering of the crown and is the hardest substance in the body. It is insensitive to pain. Unlike most other body tissues it cannot undergo repair; thus any damage caused by decay or injury is permanent. The microscope shows that it consists of long



**Structure of a tooth**



solid rods, called enamel prisms, cemented together by the interprismatic substance. The prisms run roughly at right angles to the surface.

### *Cementum*

This is the outer covering of the root and is similar in structure to bone. Cementum meets enamel at the neck of the tooth.

### *Dentine*

This occupies the interior of the crown and root, and is very sensitive to pain. Dentine from elephants' tusks is commonly known as IVORY but is exactly the same dentine as that found in human teeth.

### *Pulp*

Unlike enamel, dentine and cementum, the pulp is purely soft tissue. It contains blood vessels and nerves, and occupies the centre of the dentine. Vessels and nerves of the pulp enter the root apex through the **apical foramen** and pass up the **root canal** into the crown, where the space occupied by the pulp is called the **pulp chamber**. The nerves of the pulp are responsible for pain felt when dentine is drilled or toothache occurs. The outermost layer of the pulp, next to the dentine, is lined with the special cells which form the dentine. Under the microscope fine prolongations of these cells can be seen passing through tubes in the dentine. They run throughout the full thickness of dentine and, by their origin from the pulp, are associated with its repair processes and sensitivity to pain.

### *Supporting Structures*

Every tooth is inserted into the jaw by its root. The part of the jaw containing the teeth is known as the **alveolar process**<sup>1</sup> and is covered with a soft tissue called **gum**. The jaw bones consist of a dense outer layer known as **compact bone**<sup>2</sup> and a softer interior called **spongy bone**<sup>3</sup>.

A tooth is attached to its socket in the jaw by a soft fibrous tissue called the **periodontal membrane**<sup>4</sup>. This acts as a shock absorber and is attached to the cementum of the root and the compact bone lining the socket. The periodontal membrane contains nerves and blood vessels, but consists mainly of bundles of fibres which pass obliquely from cementum to bone.

## Notes

- <sup>1</sup> **alveolar process** — альвеолярний відросток
- <sup>2</sup> **compact bone** — компактна речовина кістки
- <sup>3</sup> **spongy bone** — губчаста речовина кістки
- <sup>4</sup> **periodontal membrane** — пародонтальна мембрана або пародонт

## Class Assignments

**V. Exercise 1.** *Find in the text English equivalents for these word combinations and sentences.*

1. складатися з. 2. бути прихованим. 3. мати назву. 4. бути нечутливим до болю. 5. таким чином. 6. бути скріпленим. 7. бути подібним за структурою. 8. це такий же дентин, як. 9. вона містить кровоносні судини і нервові закінчення. 10. пульпова камера. 11. відповідати за. 12. поряд з дентином. 13. проходити крізь. 14. пульпарні за походженням. 15. бути покритим чим-небудь. 16. діяти як.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

Visible, the junction, to be composed of, the hardest substance in the body, run roughly, meet, very sensitive to pain, soft tissue, enter, to be responsible for pain, to be associated, alveolar process, to be attached.

**Exercise 3.** *Answer these questions.*

1. What does a tooth consist of? 2. How is the junction of crown and root called? 3. What is every tooth composed of? 4. What do you know about enamel? 5. What does it consist of? 6. Where does cementum meet enamel? 7. What is cementum? 8. Is dentine sensitive to pain? 9. What does pulp contain? 10. What is the pulp chamber? 11. What supporting structures can you name?

**Exercise 4.** *Insert articles where necessary.*

1. ... tooth consists of a crown and one or more roots.



... crown is ... visible part, ... root is ... hidden part. 2. ... tooth is composed of enamel, dentine, cementum and pulp. 3. Enamel is ... hardest substance in the body. 4. Cementum is ... outer covering of the root. 5. ... vessels and ... nerves of the pulp enter ... root apex through the apical foramen. 6. ... space occupied by the pulp is called ... pulp chamber. 7. Every tooth is inserted into ... jaw by its roots. 8. ... part of the jaw containing the teeth is known as the alveolar process. 9. It is covered with ... soft tissue called gum. 10. ... tooth is attached to its socket in the jaw by ... soft tissue called the periodontal membrane.

**Exercise 5.** *Insert prepositions or adverbs.*

1. Every tooth consists ... a crown and one or more roots. 2. It is insensitive ... pain. 3. Any damage caused ... decay or injury is permanent. 4. They are cemented together ... the interprismatic substance. 5. The prisms run roughly ... right angles ... the surface. 6. Cementum is similar ... structure to bone. 7. Dentine occupies the interior ... the crown and root. 8. Vessels and nerves of the pulp pass ... the root canal ... the crown. 9. The outermost layer of the pulp is lined ... special cells. 10. They run ... the full thickness of dentine. 11. A tooth is inserted ... the jaw ... its root. 12. Any tooth is attached ... its socket ... the jaw ... a soft fibrous tissue called the periodontal membrane.

**Exercise 6.** *Ask questions to which the italicized words are the answers.*

1. The root is the part hidden *inside the jaw*. 2. The microscope shows *that it consists of long solid rods*. 3. Cementum is similar in structure to bone. 4. Cementum meets enamel *at the neck of the tooth*. 5. *Dentine* is very sensitive to pain. 6. The pulp is purely *soft tissue*. 7. The outermost layer of the pulp is lined with *the special cells*. 8. *The alveolar process* is covered with gum. 9. Periodontal membrane acts as a *shock absorber*. 10. It consists mainly of *bundles of fibers*.

**Exercise 7.** *Put questions to the text and answer them working in pairs.*

**Exercise 8.** *Give a summary of the text «Structure of the Teeth».*

**Exercise 9.** *Translate into English.*

1. Коронка, шийка і корені — складові зуба. 2. Місце переходу коронки в корінь називається шийкою. 3. Емаль — найтвердіша частина людського організму. 4. Призми, вигинаючись, проходять радіально до поверхні коронки. 5. Цемент з'єднується з емаллю біля шийки зуба. 6. Дентин — дуже чутливий до болю. 7. На відміну від інших структур пульпа є пухкою тканиною. 8. Відростки клітин пульпи проходять крізь усю товщу дентину. 9. Завдяки кореневі зуб утримується в десні. 10. Альвеолярний відросток покритий м'якою тканиною, котра має назву «десна». 11. Періодонтальна мембрана діє як амортизатор. 12. Вона складається з пучків фіброзних волокон.

**Exercise 10.** *Have a look at the picture and speak about the structure of the teeth.*

## UNIT 2. THE TEETH

### LESSON 3

#### Home Assignments

##### 1. Remember:

**-ure** — суфікс іменника. Якщо перед цим суфіксом приголосний **t**, то **-ture** читається [tʃə]: structure — структура, будова. Якщо перед ним приголосний **s**, то **-sure** — читається [ʒə]: measure [ˈmeʒə] — міра, мірка, критерій; якщо ж **-ss**, то **-ssure** читається [ʃə]: pressure [ˈpreʃə] — тиск.

1) *Read and translate:*

future, nature, mixture, structure, pleasure, measure.



За допомогою суфікса **-ion** утворюються іменники від коренів дієслів: **-tion**, **-ssion** читається [ʃn], а **-sion** після голосної читається [zn]. Склад перед суфіксом **-ion** наголошений: to erupt [i'ɾʌpt] — прорізуватися (про зуби); eruption [i'ɾʌpʃn] — прорізування (зубів), vary [ˈveəri] — міняти(ся), змінювати(ся), variation [ˈveəri'eɪʃn] — зміна.

2) *Read and translate:*

Resorbtion, occlusion, attention, invasion, session, representation.

3) *Define what part of speech the following words belong to, find out the translation, remember the words:*

call, complete, even, for , air.

II. 1. *Remember the pronunciation of the words. Translate them:*

absorbing	[əb'sɔ:biŋ]	incisor	[in'saizə]
canine	[ˈkænaɪn]	molar	[ˈmoulə]
deciduous	[di'sɪdjuəs]	permanent	[ˈpə:mənənt]

2. *Translate and learn the following words:*

adjacent	[ə'dʒeɪsənt]	to loose	[lu:s]
arrival	[ə'raɪvl]	lower	[louə]
average	[ˈævərɪdʒ]	predecessor	[ˈpri:disəsə]
backwards	[ˈbækwədz]	set	[set]
to commence	[kə'mens]	to shed	[ʃed]
common	[ˈkɒmən]	to subject	[ˈsʌbdʒɪkt]
to complete	[kəm'pli:t]	successor	[sək'sesə]
corresponding	[kɒrɪs'pɒndɪŋ]	temporary	[ˈtempərəri]
to deprive	[di'praɪv]	upper	[ʌpə]
to erupt	[i'ɾʌpt]		

3. *Read and translate the words and word combinations:*

**tooth — teeth** [tu:θ—ti:θ]: the deciduous teeth, milk or temporary teeth, permanent teeth, tooth structure, surfaces of the

teeth.

**incisor** [in'saizə]: central incisor, lateral incisor, deciduous incisor, permanent incisor, incisal edge.

**erupt** [i'ɹʌpt]: erupts, erupted, eruption, to erupt before and after birth, eruption commences, eruption is completed, unerupted.

**average** [ævərɪdʒ]: average age, on an average, average American.

III. Read the text «The Teeth» and translate it. Compose the plan and retell the text.

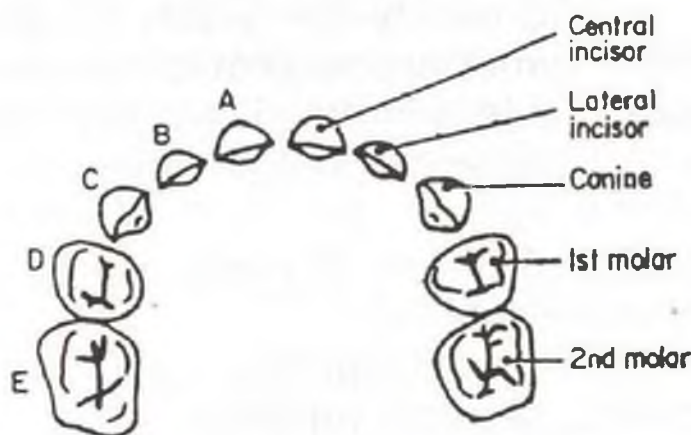
## THE TEETH

### *The Deciduous Teeth*

The deciduous teeth are the first set and are also known as milk or temporary teeth. There are twenty of them; ten in each jaw with five on each side. The five teeth on each side of both jaws are named as follows from the front backwards:

- A. CENTRAL INCISOR
- B. LATERAL INCISOR
- C. CANINE
- D. 1st MOLAR
- E. 2nd MOLAR

### *Eruption*



### ***Deciduous teeth***

All teeth start developing inside the jaws and their arrival in the mouth is known as eruption. Deciduous teeth start developing before birth and erupt after birth. Eruption starts at six months and is completed at two years. Individual variation is common but the average ages are as follows:

A. Central incisor, 6



months;

B. Lateral incisor, 8 months;

C. Canine, 18 months;

D. 1st MOLAR, 12 months;

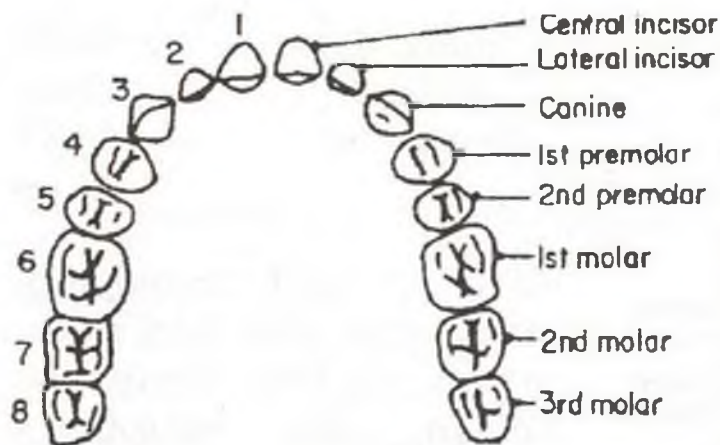
E. 2nd MOLAR, 24 months.

Lower teeth usually erupt before their corresponding upper.

### *The Permanent Teeth*

Permanent teeth are the second and final set. There are thirty-two of them; sixteen in each jaw, eight on each side. Like teeth, the eight on each side of both jaws have the same names:

1. CENTRAL INCISOR
2. LATERAL INCISOR
3. CANINE
4. 1st PREMOLAR
5. 2nd PREMOLAR
6. 1st MOLAR
7. 2nd MOLAR
8. 3d MOLAR (wisdom tooth).



### *Eruption*

Permanent teeth start developing at birth. Eruption commences at six years of age and is completed at eighteen to twenty-five years. Eruption times are subject to considerable individual variation but the average ages are:

### ***Permanent teeth***

1. Central incisor, 7 years. 2. Lateral incisor, 8 years.
3. Canine, 9 years (lower); 11 years (upper).
4. 1st premolar, 10 years (lower); 9 years (upper).
5. 2nd premolar, 11 years (lower); 10 years (upper).
6. 1st molar, 6 years.
7. 2nd molar, 12 years.
8. 3d molar, 18-26 years.

After the deciduous teeth loosen, they are shed and are soon replaced by eruption of their permanent successors. Deciduous incisors and canines are replaced by permanent teeth of the

same name. Deciduous molars, however, are replaced by premolars. Thus the permanent molars erupt without having any deciduous predecessors. Deciduous teeth become loose by RESORPTION of their roots which deprives them of their attachment to the jaws. The unerupted permanent successors lie adjacent to the absorbing deciduous roots and are thus able to erupt into their places when the deciduous teeth are finally shed.

## **Class Assignments**

**IV. Exercise 1.** *Find in the text English equivalents for these words and word combinations.*

1. також відомі як. 2. десять у кожній щелепі — по п'ять з кожного боку. 3. мати назву. 4. прорізуються після народження. 5. індивідуальна відмінність. 6. протилежні верхні. 7. як і тимчасові зуби. 8. завершується. 9. незабаром замінюються. 10. мати таку ж назву. 11. випадають через розсмоктування їх коренів. 12. ті, що не прорізулися. 13. здатні до прорізування.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

to be named, arrival, usually, at birth, to be subject, loosen, premolars, deprive, to be shed.

**Exercise 3.** *Make the sentences negative and then interrogative.*

1. The deciduous teeth are the first set. 2. All teeth start developing inside the jaw. 3. Eruption starts at six months. 4. Permanent teeth are the second and final set. 5. After the deciduous teeth loosen, they are shed.

**Exercise 4.** *Answer these questions.*

1. How are deciduous teeth also named? 2. How many deciduous teeth do you know and what are they? 3. When do deciduous teeth start developing? 4. What are average ages for tooth eruption? 5. When do lower teeth usually erupt? 6. How many permanent teeth are there? 7. When does eruption of permanent teeth start? And when is it completed? 8. What are deciduous teeth replaced by? 9. Why do deciduous teeth become loose?



**Exercise 5.** *Insert articles where necessary.*

1. ... deciduous teeth are also known as temporary. 2. There are five teeth on ... each side of ... jaw. 3. Their arrival in ... mouth is known as eruption. 4. Eruption starts at six month and is completed at ... two years. 5. Permanent teeth are ... second set. 6. Permanent teeth start developing at ... birth. 7. Eruption is completed at eighteen to twenty-five years of ... age. 8. Deciduous molars are replaced by ... premolars.

**Exercise 6.** *Insert prepositions or adverbs.*

1. There are ten teeth ... each jaw. 2. Deciduous teeth start developing ... birth and erupt ... birth. 3. Permanent teeth start developing ... birth. 4. Eruption times are subject ... considerable individual variation. 5. They are replaced ... eruption of their permanent successors. 6. The permanent molars erupt ... having any deciduous predecessors. 7. The resorpted roots deprive temporary teeth ... their attachment ... the jaw.

**Exercise 7.** *Give a summary of the text «The Teeth».*

**Exercise 8.** *Ask 10 questions based on the text and answer them.*

**Exercise 9.** *Translate into English.*

1. Дитина має 20 тимчасових зубів: у кожній щелепі — 10 (по п'ять з кожного боку). 2. Зуби починають прорізуватися в шість місяців, другі моляри прорізаються в два роки останніми. 3. Постійні зуби починають розвиватися у людини з дня народження. 4. Строк прорізування зубів у кожної людини різний. 5. Тимчасові різці і клики замінюються на постійні з такою ж назвою. 6. Тимчасові зуби випадають тому, що внаслідок розсмоктування їх коренів вони позбавлені опори в щелепі. 7. Постійні моляри не мають своїх тимчасових попередників. 8. Тимчасові моляри замінюються премолярами. 9. Коли тимчасовий зуб випадає, на його місце прорізується його наступник — постійний. 10. Прорізування постійних зубів завершується до 18-25 років.

**Exercise 10.** *Read the text «Surfaces of the Teeth» and write out the main terms characterizing different surfaces of the teeth. Translate the text and retell it.*

## SURFACES OF THE TEETH

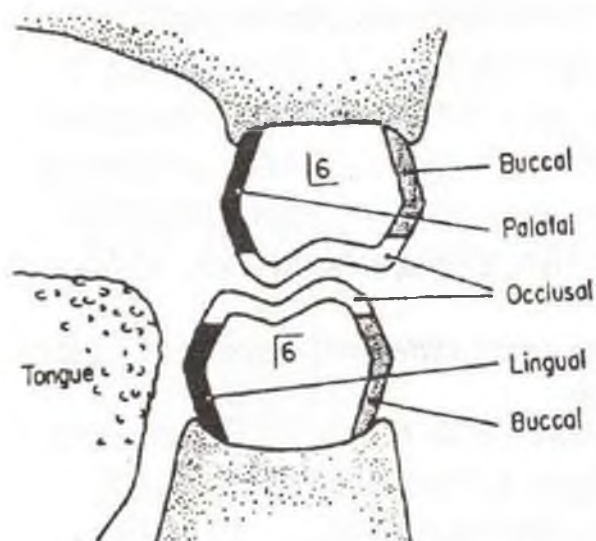
The biting surface of molars and premolars is called the **OCCLUSAL SURFACE**. On incisors and canines it is called the **INCISAL EDGE**. The occlusal surface of molars and premolars is raised up into mounds called **CUSPS**. Between the cusps are crevices known as **FISSURES**.

The outer surface of molars and premolars — the surface facing the cheeks — is called the **BUCCAL** surface. In the case of incisors and canines this surface is called **LABIAL** as it faces the lips instead of the cheeks.

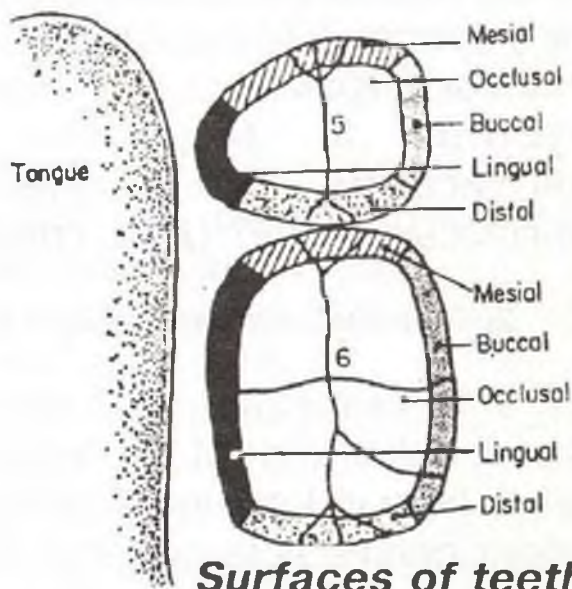
The inner surface of every lower tooth faces the tongue so it is called the **LINGUAL** surface. This surface in all upper teeth is known as the **PALATAL** surface.

The remaining surfaces are those between adjoining teeth. The surface facing towards the front of the mouth is called **MESIAL** and that facing backwards is called **DISTAL**.

The adjective **CERVICAL** is used for the neck of the tooth.



**Surfaces of teeth**



**Surfaces of teeth**

## LESSON 4

### Home Assignments

1. Read the sentences, name the parts of the sentence and answer the questions:

It is cold today  
It was difficult

— Сьогодні холодно.  
— Було важко.



It will be painfull — Буде боляче.

1. Чи є підмет в українських реченнях? Як називаються такі речення? 2. Чи є підмет у відповідних англійських реченнях? Якщо так, то чим він виражений? 3. Чи перекладається підмет *it*? 4. З чого складається присудок безособового речення? (Див. граматичний довідник, стор. 503)

1) *Translate the following sentences:*

1. It is evident that sweets between meals are the cause of caries. 2. It was not difficult to answer your questions. 3. Will it be time to examine this patient?

II. *Pay attention to the translating of the following sentence into English:*

Кажуть, що він мешкає тут. | 1. They say that he lives here.  
2. It is said that he lives here.  
3. One says that he lives here.

1. Розберіть українське речення за членами речення. Визначте у головному реченні підмет і присудок. 2. Яку назву в українській граматиці має речення, де підмет можна лише припустити? 3. Порівняйте головне українське речення з англійським. Як це українське речення перекладене на англійську мову? (Див. граматичний довідник, стор. 503)

2) *Translate indefinite personal sentences using different ways of translating:*

1. Установили, that incisors have one root. 2. Вважають, that a collection of extracted tooth in good condition is of great help in learning anatomy. 3. Визначили, ... that the upper canine is larger than the lower. 4. Можемо сказати, ... that first molars are the largest teeth of all.

III. *Learn the following words and word combinations:*

arch	[ɑ:tʃ]	frequently	[ˈfri:kwəntli]
bite	[baɪt]	fuse	[fju:z]
chewing	[ˈtʃi:ɪŋ]	grinding	[ˈgraɪndɪŋ]
chisel-shaped	[ˈtʃɪzəl ˈʃeɪpt]	overlap	[ˈoʊvələp]
dentition	[den ˈtɪʃən]	remaining	[ri ˈmeɪnɪŋ]

extract [ɪksˈtrækt]  
flattened [ˈflætnd]

ridge [rɪdʒ]  
swallowing [ˈswəloʊɪŋ]

**IV. Revise grammar material and define the forms and functions of the verbs *to be* and *to have* in the text.** (Див. граматичний довідник, стор. 493-494)

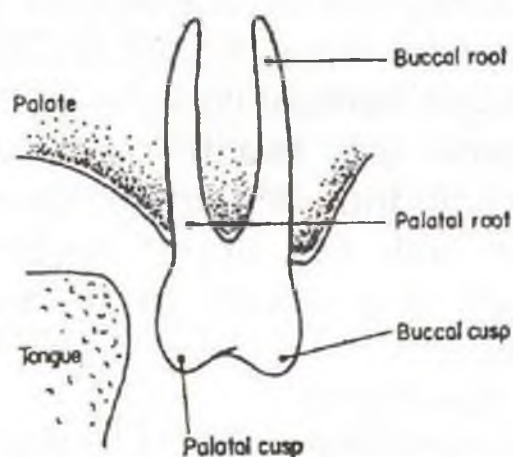
## ANATOMY OF INDIVIDUAL TEETH

A collection of extracted teeth in good condition is a great help in learning anatomy. Incisors have one root and flattened chisel-shaped crowns. The upper crowns are much wider than their lower counterparts. The upper lateral incisor crown is smaller than the upper central; but the lower lateral crown is slightly larger than the lower central.

Permanent canines have large conical crowns and one long root. The upper canine is larger than the lower and has the longest root of the whole dentition.

The upper first premolar has two roots, one buccal and one palatal. The remaining premolars have one root. Each premolar has two cusps, one buccal and one palatal or lingual.

The cusps of upper premolars are much bigger than lowers and are almost equal in size. The lingual cusp of lower premolars is much smaller than the buccal cusp.



Upper molars have three roots, two buccal and one palatal. The buccal roots are mesial and distal.

Lower molars have two roots, one mesial and one distal.

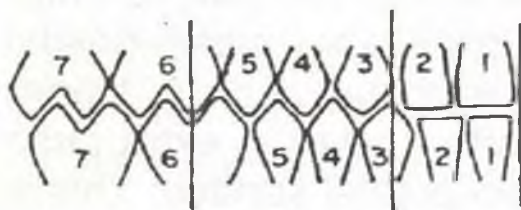
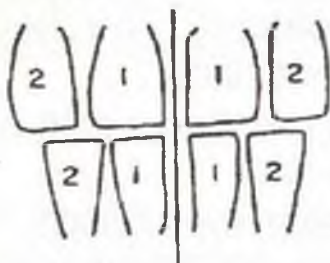
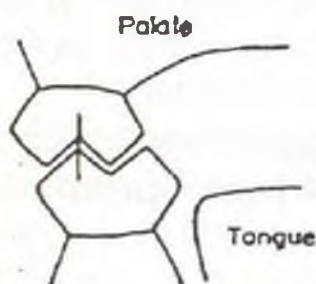
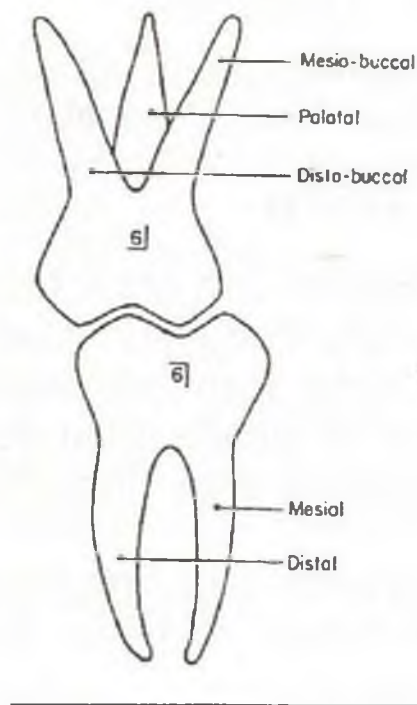
Upper molars have four cusps, two buccal and two palatal. Their crowns are characterised by an oblique ridge which runs from the mesio-palatal cusp to the disto-buccal cusp. Upper first molars often have an extra cusp on their mesio-palatal surface. This is called the CUSP OF CARABELLI.

### ***Upper first premolar***

Lower first molars have five cusps, three buccal and two lingual. Lower second molars have four cusps, two buccal and two lingual.

First molars are the largest teeth of all. Third molars are very





### **Normal occlusion**

into a soft mass suitable for SWALLOWING.

variable in size and number of roots and cusps. Usually they are the smallest molars and their roots are frequently fused together.

Deciduous molars are like miniature permanent molars. They have the same NUMBER of roots but their crowns are more bulbous than permanent ones. To provide space for the developing PREMOLARS, the roots OF DECIDUOUS molars are more divergent than those of permanent molars.

### **Occlusion of the Teeth**

When the upper and lower teeth are closed together, they are said to be in occlusion. The ARCH of the upper teeth is larger than the lower; thus upper teeth overlap the lowers on the BUCCAL side. Lower BUCCAL cusps accordingly bite into the fissure between upper BUCCAL and palatal cusps.

At the MIDLINE the mesial edges of upper and lower central INCISORS form one straight vertical line. As lower central incisors are much narrower than uppers, all the remaining lower teeth occlude with two upper teeth - their corresponding upper tooth and the one in front.

### **Functions of the Teeth**

Incisors and canines are for cutting up food into smaller pieces ready for chewing.

PREMOLARS and molars are for chewing; their cusps grinding the food

## Class Assignments

**V. Exercise 1.** *Find in the text English equivalent for these word combinations.*

1. надавати велику допомогу. 2. набагато ширше. 3. проти-  
лежні. 4. найдовший корінь у зубному ряду. 5. майже одна-  
кові за розміром. 6. характеризуються скошеним ріжучим  
краєм. 7. різноманітний за розміром. 8. часто з'єднані ра-  
зом. 9. з'єднуватися разом. 10. верхні зуби перекривають  
нижні. 11. набагато вужче. 12. для розм'якшення їжі.  
13. зручний для ковтання.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

in learning anatomy, counterparts, conical crowns, the lingual  
cusp, buccal roots, oblique ridge, variable, fused together,  
in occlusion, bite, narrower, the mesial edges.

**Exercise 3.** *Answer the questions.*

1. What is a great help in learning anatomy? 2. What crowns  
have incisors? 3. Which canine is larger: upper or lower? 4. How  
many cusps has each premolar? 5. What roots have upper  
molars? 6. How can you characterize the crowns of the upper  
molars? 7. What are the largest teeth of all? 8. When are upper  
and lower teeth in occlusion? 9. Where does the mesial cusp  
of the upper first molar bite? 10. What are functions of the  
teeth?

**Exercise 4.** *Insert articles where necessary.*

1. ... upper crowns are much wider than their lower counterparts.  
2. ... lower lateral crown is slightly larger than ... lower central.  
3. ... canines have large conical crowns. 4. ... remaining pre-  
molars have one root. 5. ... cusps of upper premolars are almost  
equal in ... size. 6. ... buccal roots are ... mesial and distal.  
7. ... oblique ridge runs from the mesio-palatal cusp to the disto-  
buccal cusp. 8. First molars are ... largest teeth of all. 9. When  
... upper and lower teeth are closed together they are in ...  
occlusion. 10. Incisors and canines are for cutting up ... food into



smaller pieces. 11. Premolars and molars grind ... food into ... soft mass.

**Exercise 5.** *Insert prepositions or adverbs.*

1. A collection of extracted teeth ... good condition is a great help ... learning anatomy. 2. The upper canine has the longest root ... the whole dentition. 3. The cusps ... upper premolars are almost equal ... size. 4. Their crowns are characterized ... an oblique ridge. 5. Upper first molar often have an extra cusp ... their mesio-palatal surface. 6. Upper teeth overlap the lower ... the buccal side. 7. ... the midline the mesial edges ... lower central incisors form one straight vertical line. 8. Their cusps grind the food ... a soft mass.

**Exercise 6.** *Give a summary of the text «Anatomy of Individual Teeth».*

**Exercise 7.** *Ask 10 questions based on the text «Occlusion of the Teeth».*

**Exercise 8.** *Translate into English.*

1. Різці мають долотоподібну форму коронки. 2. Коронка клика конічної форми. 3. Верхній перший премоляр має щічний та піднебінний корені. 4. Бугри нижніх премолярів менші за верхні. 5. Нижні моляри мають два корені — медіальний і дистальний. 6. Скіс коронки верхніх молярів йде від медіально-піднебінного до дистально-щічного бугрів. 7. Третій моляр може бути різноманітних розмірів, а також мати різну кількість коренів та бугрів. 8. Оклюзія зубів — це змикання зубних рядів. 9. Різці та клики подрібнюють їжу на маленькі кусочки, готові до пережовування. 11. Премоляри і моляри перемелюють їжу на м'яку масу, зручну для ковтання.

**Exercise 9.** *Speak on the anatomy of teeth, the occlusion of the teeth and their function.*

## LESSON 5

### Home Assignments

I. 1) *Translate the sentences:*

1. The maxilla is immovable. 2. The hard palate separates the mouth from the nose. 3. The only jaw which can move is the mandible. 4. The junction of body and ramus is called the angle of the mandible. 5. During extraction of the teeth, the flow may be perforated. 6. These muscles always produce these movements.

## II. Remember:

**-(i)ty** — суфікс іменників: quantity [ˈkwɒntɪti] — кількість, quality [ˈkwɒlɪti] — якість

2) Read and translate:

activity, reality, ability, responsibility, possibility.

За допомогою суфікса **-ment** утворюються іменники від дієслів: treat [tri:t] — лікувати; treatment [ˈtri:tmənt] — лікування.

3) Read and translate:

movement, appointment, department, achievement, requirement.

III. Read and remember the pronunciation of the following words. Translate them:

antrum	[ænˈtrʌm]	mastication	[ˈmæstikeɪʃn]
coronoid	[ˈkɒrɒnɔɪd]	nasal	[ˈneɪzəl]
condyle	[kɒnˈdaɪl]	palate	[ˈpælit]
jaw	[dʒɔ:]	ramus	[reɪˈmʌs]
maxilla	[ˈmæksɪlə]	sinus	[ˈsaɪnəs]
mandible	[ˈmændɪbl]		

IV. Read and translate the following words and word combinations:

**jaw** [dʒɔ:]: the upper jaw, the lower jaw, the only jaw that can move, movements of the jaws.

**palate** [ˈpælit]: soft palate, hard palate, the hard palate forms the roof of the mouth, the hard palate separates.

**antrum** [ænˈtrʌm]: the floor of the antrum, inside the antrum, the antrum is an air space, is known as antrum.

**move** [mu:v]: moves, moved, movable, immovable, can move, movement, it moves forward, to allow to move.



V. Read the text, translate it and write out the equivalents for the following words and word combinations:

набагато тонший, відділяти від, по обидва боки, мати велике практичне значення, саме над, мати форму підкови, нижче підборіддя, на верхівці, захопити їжу, пара ножиць, виконується.

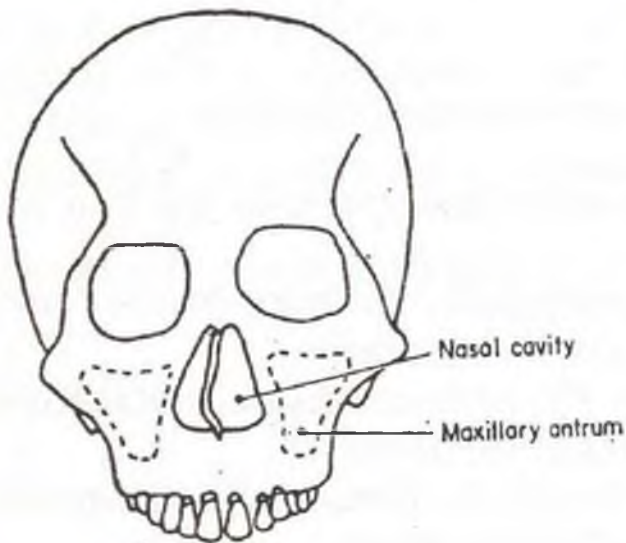
## THE JAWS

The upper jaw is called the MAXILLA and the lower is called the MANDIBLE.

The maxilla is fixed to the skull and is immovable. Its outer layer of compact bone is much thinner than that of the mandible. The HARD PALATE is part of the maxilla and forms the roof of the mouth. It separates the oral cavity (mouth) from the nasal cavity (nose).

On either side of the nasal cavity the maxilla is hollow. Each hollow is known as a MAXILLARY SINUS or ANTRUM. It is of great practical importance as the floor of the antrum lies just above the roots of the premolar and molar teeth. During extraction of these teeth, the floor may be perforated or a root pushed inside the antrum. As the antrum is an air space it gives resonance to the voice.

The mandible is the jaw which moves. It is shaped like a horseshoe with its ends bent up at right angles. The part bearing teeth is called the BODY of the mandible and each vertical end of the horseshoe is called a RAMUS. The junction of body and ramus is called the ANGLE of the mandible.

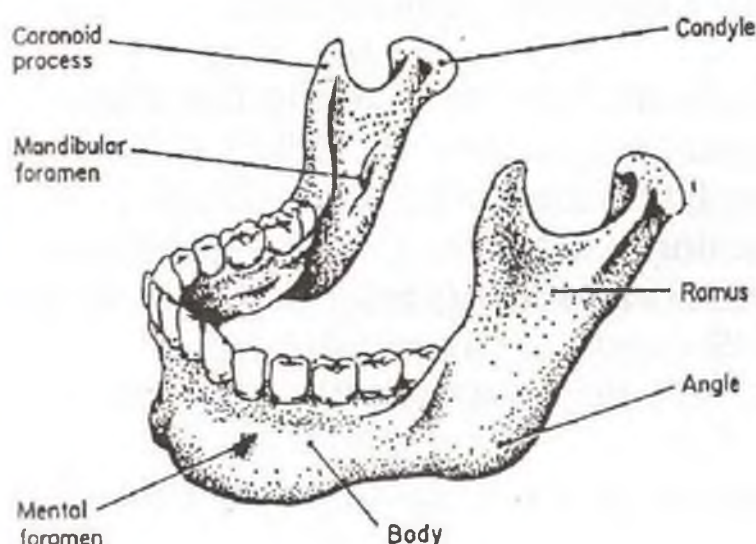


***The upper jaw***

Attached to the ramus are the MUSCLES OF MASTICATION which close the mouth. Muscles opening the mouth are attached to the body just below the chin.

On top of the ramus are two projections: the CORONOID PROCESS in front and the

CONDYLE behind. The condyle and base of the skull form the TEMPORO-MANDIBULAR JOINT, which allows the lower jaw to move. The only jaw which can move is the mandible. The first movement involved in eating is a hinge-like opening of the mandible to separate the incisors. It then moves forward until the incisors can grasp the food between their cutting edges. The mandible then returns backwards and closes. This produces a shearing action of the incisors which thereby cut the food into smaller pieces ready for chewing. It is similar to the cutting action of a pair of scissors.



Chewing is brought about by rotary movements of the mandible which swings from side to side, crushing food between the cusps of opposing molars and premolars. All these movements of the jaws are produced by the muscles of mastication.

### ***The lower jaw***

## **Class Assignments**

**VI. Exercise 1.** *Quote the sentences in which the following words and word combinations are used in the text.*

to be fixed to the skull, to form the roof of the mouth, to be known, to lie, to be perforated, to be shaped, to be attached, return backwards, to be similar, rotary movements.

**Exercise 2.** *Find in the text sentences in which the Passive Voice is used.*  
(Див. грам. довід. стор. 498)

**Exercise 3.** *Answer the questions.*

1. How can you call the upper and the lower jaws? 2. What is the



hard palate? 3. What is known as antrum? 4. What may take place during extraction of premolars and molars? 5. What jaw moves: the mandible or the maxilla? 6. What movements of the jaws do you know? 7. The temporo-mandibular joint allows the lower jaw to move, doesn't it? 8. What is the first movement of eating? 9. What teeth cut the food into smaller pieces? 10. Will you describe chewing?

**Exercise 4.** *Insert prepositions or adverbs where necessary. Retell the text.*

## **SOFT TISSUES**

The skin ... the mouth, i.e. the red tissue covering the cheeks, floor of the mouth, palate and tongue etc, is called MUCOUS MEMBRANE. It contains many tiny glands which contribute ... the lubricating and cleansing functions ... saliva. The space between the teeth and the mucous membrane lining the cheeks and lips is called the BUCCAL SULCUS.

The soft palate is a flap ... soft tissue attached ... the back of the hard palate. Its function is to seal off the oral cavity ... the nasal cavity during swallowing, in order to prevent food passing up ... the nose.

**Exercise 5.** *Insert articles or possessive pronouns where necessary.*

## **THE TONGUE**

The floor of ... mouth lies within the arch of the mandible and is occupied by ... tongue. The tongue is attached to ... floor of ... mouth by a thin fold of mucous membrane called the LINGUAL FRENUM. The upper lip is attached to ... gum above the central incisors by a similar frenum.

The functions of ... tongue are swallowing, speech, taste and cleansing ... mouth. It is a mobile muscular organ covered by a thick layer of mucous membrane on top and a thinner layer below. The thick upper layer is studded with minute projections which give it a rough surface. This helps ... cleansing action of the tongue. Situated in these minute projections are TASTE BUDS which allow us to distinguish ... sweet, sour, salt and bitter flavours.

The swallowing, speech and cleansing functions are brought about by ... muscular activity of ... tongue. Swallowing is a complex muscular act which prevents food entering ... nasal cavity or larynx instead of the oesophagus.

**Exercise 6.** *Ask twelve questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text «The Jaws»*

**Exercise 8.** *Translate these sentences.*

1. Верхня щелепа нерухома. 2. Тверде піднебіння розмежовує рот та ніс. 3. Дно гайморової пазухи розташоване саме над коренями молярів. 4. Верхня щелепа має вигляд підкови. 5. Місце з'єднання тіла й гілки називається кутом нижньої щелепи. 6. М'язи, за допомогою яких відкривається рот, прикріплені до тіла нижньої щелепи. 7. Жування здійснюється обертальними рухами нижньої щелепи. 8. Їжа перемелюється на маленькі шматочки, які можна ковтати. 9. Всі рухи щелеп забезпечують жувальні м'язи.

**Exercise 9.** *Read the text, give the plan of it, describe the position of salivary glands.*

## **SALIVARY GLANDS**

Saliva is produced by the salivary glands which are situated close to the mandible.

The parotid gland lies partly over the outside and partly behind the ramus.

The duct from the parotid gland passes forward through the cheek to open into the buccal sulcus opposite the upper second molar.

The submandibular gland lies in the floor of the mouth, against the inner surface of the body, near the angle of the mandible. The submandibular duct passes forward in the floor of the mouth to open at the midline, beside the lingual frenum.

The sublingual gland lies in the similar position to the submandibular gland but much further forward. There are several sublingual ducts and these open into the floor of the mouth just behind the orifice of the submandibular duct.



## LESSON 6

### CONVERSATIONS: A. THE TEETH. B. THE JAWS.

#### Home Assignments

#### I. Learn this speech pattern.

I'd like to know what every . — Я б хотів знати,  
tooth consists of з чого складається зуб.

1) Make up sentences using the table and translate them.

I'd like to know	what the crown is;
	how the junction of crown and root is called;
	what every tooth is composed of;
	if the pulp is purely soft tissue;
	what alveolar process is.

2) Make up 5 sentences of your own using pattern 1.

3) Review the words to the texts covered. Form nouns from the following verbs and translate them.

to prevent, to treat, to decay, to establish, to cause, to educate,  
to improve, to examine, to extract, to graduate.

#### II. Read and translate the dialogues.

##### A. THE TEETH.

ALEX: — Hello, Nick.

NICK: — Hello, Alex.

— Are you free now?

— Yes, I am. Let us prepare our Dental Anatomy lesson for tomorrow.

— Tomorrow we shall have the lesson on the teeth.

— I don't know well the structure of the tooth.

— I can help you if you like.

— Can you answer my questions?

— With pleasure.

— What does every tooth consist of?

- Every tooth consists of a crown, a neck and one or more roots. The crown is the part visible in the mouth. The root is the part hidden inside the jaw.
- And I'd like to know what the neck is.
- The junction of crown and root is called the neck. The end of the root is called the apex.
- What is every tooth composed of?
- Every tooth is composed of enamel, dentine, cementum and pulp.
- Thank you. I think tomorrow I shall answer well.

### **AT THE LESSON**

TEACHER: Can you tell me what you know about enamel?

STUDENT: Enamel is the outer covering of the crown. It is the hardest substance in the body. It is insensitive to pain. It consists of enamel prisms, cemented together by the interprismatic substance.

- You are right. Your answer is good. The next question is what do you know about cementum and dentine?
- Cementum is the outer covering of the root and is similar in structure to bone. Dentine occupies the interior of the crown and root. It is very sensitive to pain.
- Good. And what is pulp?
- The pulp is purely soft tissue. It contains blood vessels and nerves. The pulp occupies the centre of the dentine. Vessels and nerves of the pulp enter the root apex through the apical foramen and pass up the root canal into the crown. The space occupied by the pulp here is called the pulp chamber.
- What can you tell me about the supporting structures?
- The part of the jaw containing the teeth is known as the alveolar process. It is covered with a gum. A tooth is attached to its socket in the jaw by a soft fibrous tissue called the periodontal membrane.
- Thank you. Your answer was good.

### **CAN YOU ANSWER MY QUESTIONS?**

TEACHER: The deciduous teeth are also known as «baby teeth». There are twenty of them.

STUDENT: How are they named?



- The five teeth on each side of both jaws are named as follows: central incisors, lateral incisors, canine, 1st molar, 2nd molar.
- When do they start developing?
- Deciduous teeth start developing before birth. Eruption starts at six months and is completed at two years.
- And is there any difference in the first and second set?
- Yes, of course. Permanent teeth are the second set. There are thirty-two of them. After the deciduous teeth loosen, they are soon replaced by eruption of the permanent ones. Deciduous incisors and canine are replaced by permanent teeth of the same name. Deciduous molars are replaced by premolars. We must also speak about 3d molars. So there are eight permanent teeth on each side of both jaws.

## **B. THE JAWS**

**TEACHER:** Do you know how the upper and the lower jaws are also called?

**STUDENT:** Yes. The upper jaw is called the maxilla and the lower is called the mandible.

- What is the hard palate?
- It is the part of the maxilla that forms the roof of the mouth.
- Right. And is the maxilla movable?
- No. It is immovable. The only jaw that can move is the mandible. The temporo-mandibular joint allows the lower jaw to move. All the movements of the jaws are produced by the muscles of mastication.

## **Class Assignments**

**III. Exercise 1.** *Find in the dialogues English equivalents for these word combinations and sentences.*

1. давай підготуємося до уроку з анатомії зубів.
2. зуб складається з.
3. частина в роті, котру ми можемо бачити.
4. частина, прихована в яснах.
5. верхівка кореня називається апексом.
6. найтвердіша тканина в організмі людини.

7. емалеві призми поєднуються за допомогою міжпризмової речовини. 8. чутливий до болю. 9. місце, котре тут займає пульпа. 10. прикріплений до кишені в щелепі. 11. з кожного боку обох щелеп. 12. прорізування зубів.

**Exercise 2.** *Quote the sentences in which these words are used in the dialogues.*

to be free, the junction, to be composed of, outer covering, insensitive to pain, to be similar in structure, to occupy, soft tissue, apical foramen, a gum, «baby teeth», to be named, before birth, the second set, premolars.

**Exercise 3.** *Make up necessary substitution and reproduce the dialogues.*

1. — Let us prepare our Dental Anatomy lesson for tomorrow.

— Tomorrow we shall have the lesson on **the teeth**.

(structure of the teeth, anatomy of individual teeth, soft tissues, muscles of mastication, functions of the teeth).

2. — What does **every tooth** consist of?

— **Every tooth** consists of a **crown**, a **neck** and **one or more roots**.

(enamel, long solid rods; pulp, soft tissues; deciduous set, 20 temporary teeth)

3. — What is **enamel**?

— It is the **hardest substance in the body**.

(cementum, outer covering of the root; dentine, interior part of the crown; pulp, purely soft tissue)

4. — The deciduous teeth are also known as temporary teeth, aren't they?

— Yes, you are right. We can also call them «**baby teeth**».  
(milk teeth, the first set)

5. — Is the **upper** or the **lower** jaw movable?

— The only jaw that can move is the **lower** jaw. The upper jaw is fixed to the skull and is immovable.  
(maxilla, mandible)



**Exercise 4.** *Fill in the missing remarks. Reproduce the dialogues.*

1. — Can you answer my questions?  
— ...  
— What does every tooth consist of?  
— ...  
— What are neck and apex?  
— ...  
— What is every tooth composed of?  
— ...
2. — What do you know about enamel?  
— ...  
— I'd like to know what cementum is.  
— ...  
— What does dentine occupy?  
— ...  
— What is pulp?  
— ...  
— What can you tell me about the alveolar process?  
— ...  
— By what is a tooth attached to its socket in the jaw?  
— ...
3. — How many deciduous teeth are there and what are they?  
— ...  
— When do they start erupting?  
— ...  
— Are permanent teeth the second and final set?  
— ...  
— Is their number the same?  
— ...
4. — How are the low and upper jaws also called?  
— ...  
— What is the hard palate?  
— ...  
— And what jaw is immovable?  
— ...

**Exercise 5.** *Translate into English.*

1. — Привіт.

- Привіт.
- Що ти робиш?
- Я готую на завтра домашнє завдання з анатомії зубів.
- Я не знаю як слід структуру зуба.
- Можу допомогти тобі, якщо бажаєш.
- Звичайно. Скажи мені, будь ласка, з чого складається зуб?
- Зуб складається з коронки, шийки та кореня чи коренів.
- А що таке шийка зуба?
- Шийка зуба — це місце переходу коронки в корінь. Верхівка кореня називається апексом.
- З яких структур складається зуб?
- З емалі, дентину, цементу і пульпи.
- 2. — Емаль покриває коронку, чи не так?
- Так, емаль — найтвердіша тканина організму людини.
- А де розташований дентин?
- Дентин займає внутрішню частину коронки й кореня. Він дуже чутливий до болю.
- А цемент?
- Цемент — це зовнішнє покриття кореня, за структурою він подібний до кістки.
- Чи тверда тканина пульпа?
- Ні, пульпа — м'яка тканина. Вона містить кров'яні судини та нервові закінчення.
- А що тобі відомо про підтримувальні структури?
- До них належать: альвеолярний відросток, покритий десною, корінь, періодонтальна мембрана, кістки щелеп.
- 3. — Як можна назвати перші зуби?
- Це молочні зуби або тимчасові.
- Скільки їх у дітей?
- 20. По п'ять з кожного боку кожної щелепи.
- Коли вони прорізаються?
- Як правило, з шести місяців до 2-х років.
- А що ти можеш розповісти про постійні зуби?
- Постійні зуби приходять на зміну молочним. Їх 32: центральні й латеральні різці, клики, 1-й і 2-й премоляри, 1-й, 2-й і 3-й моляри. Термін їх прорізування індивідуальний, проте перші постійні зуби у середньому з'являються в 6 років, а останні моляри — у 18-25 років.



4. — Які ще назви мають верхня та нижня щелепи?  
— Вони мають назви *maxilla* і *mandible*.  
— Котра з них нерухома?  
— Верхня, оскільки з'єднана з черепом.  
— А нижня?  
— Вона рухається завдяки скронево-нижньощелепному суглобові.  
— Дякую. Ти мені дуже допоміг розібратися в анатомії зубів.

**Exercise 6.** *Make up dialogues based on these situations.*

1. **STRUCTURE OF THE TEETH.** 2. **THE DECIDUOUS TEETH.**  
3. **THE PERMANENT TEETH.** 4. **THE JAWS.**

## LESSON 7

### REVISION

#### Class Assignments

- I. *Read the text and translate it in a written form, using a dictionary.*

### TEETH AND GUMS

Six months or so after birth, the first *deciduous* teeth (baby teeth, milk teeth) erupt through the gums. A normal child will eventually have 20 «baby» teeth, each jaw holding 10 teeth: 4 *incisors* (for cutting), 2 *canines* (for tearing), and 4 *premolars* (for grinding). The deciduous teeth are lost when the permanent teeth are ready to emerge. Both sets of teeth are usually present in the gums at birth, or shortly afterward, with the permanent teeth lying under the deciduous teeth. By the time a permanent tooth is ready to erupt, the root of the deciduous tooth above it has been completely resorbed by osteoclasts. The six permanent molars in each jaw have no deciduous predecessors. The shedding of deciduous teeth and the appearance of permanent teeth follow a fairly consistent pattern.

The 32 permanent teeth (16 in each jaw) are arranged in two arches, each of them holds 4 *incisors* (cutting teeth), 2 canines (cuspid, with one point or cusps), 4 primolars and 6 molars (millstone teeth). Because the upper incisors are wider than the lower ones, the lower grinding teeth are usually aligned slightly in front of the upper grinders. This arrangement enhances the grinding motion between the upper and lower teeth.

The teeth are held in their sockets by bundles of connective tissue called periodontal ligaments. The collagenous fibers of each ligament extend from the alveolar bone into the cement of the tooth, and allow for some normal movement of the teeth. Nerve endings in the ligaments monitor the pressures of chewing and relay the information to the brain centers involved with chewing movements.

II. *Form and translate the new words using the given suffixes.*

**-ion(-ation), -sion, -tion**: fix, prepare, decide, add, inform, infect, protect;  
**-ment**: require, achieve, treat, appoint, excite;  
**-(i)ty**: responsible, human, special, possible.

III. *State the part of speech of the words in bold type. Translate the sentences.*

1. The tooth is sensitive to **pain**. 2. It **pains** badly. 3. Any **damage** caused by decay is permanent. 4. You can **damage** the pulp chamber if you are not attractive. 5. The **start** of the disease was sudden. 6. Deciduous teeth **start** developing before birth.

IV. *Put special questions to the following sentences using the given interrogative words.*

1. All teeth, no matter what type, consist of the same parts: a root, a crown, a neck (What parts). 2. The lower molars have two flattened roots (How many roots). 3. The apical foramen leads successfully into the root canal (Where). 4. Each tooth is composed of dentine, enamel, cement and pulp (What).



**V.** *Read the passages and answer the questions.*

### **WHY ARE CANINE TEETH CALLED «EYETEETH»?**

Early anatomical schemes often named body parts according to their relation to other structures or functions. Eyeteeth were named so probably because they lie directly under the eyes. (As another example, people in the Western world wear wedding rings on the fourth finger of the left hand, because it was believed that this finger was connected directly to the heart).

### **CHEWING.**

Although chewing can certainly be voluntary, most of the chewing we do during a meal is an automatic rhythmic reflex that is triggered by the pressure of food against the teeth, gums, tongue and hard palate. Such pressure causes the jaw muscles to relax and the jaw to drop slightly; then, as opposite muscles contract in an attempt to balance the relaxation the jaw is pulled up again.

- 
1. Why are canine teeth called eyeteeth?
  2. Is chewing voluntary or automatic?

**VI.** *Read the text. Give the annotation of it.*

### **PARTS OF A TOOTH**

All teeth no matter what type consist of the same three parts: a root embedded in a socket in the alveolar process of a jaw bone, a crown projecting upward from the gum and a narrowed neck between the root and the crown, which is surrounded by the gum. The incisors, canines and premolars have a double root. The lower molars have two flattened roots, and the upper molars have three conical roots. At the apex of each root is the apical foramen, which leads successively into the root canal and root cavity.

Each tooth is composed of dentine, enamel, cement and pulp. The dentine is the extremely sensitive yellowish portion sur-

rounding the pulp cavity. It forms the bulk of the tooth. The enamel is the insensitive white covering of the crown. It is the hardest substance in the body. In order to cut through enamel, a dentist's drill spins at about half a million revolution per minute. The cement is the bonelike covering of the neck and root. The pulp is the soft core of connective tissue that contains the nerves and blood vessels of the tooth.

Teeth are derived from the same tissue as the skin. The enamel is formed from the embryonic epidermis, and the dentine, pulp, and cement are formed from the embrionic dermis.

The gum also called the gingiva is the firm connective tissue covered with mucous membrane that surrounds the alveolar process of the teeth. The gums are usually attached to the enamel of the tooth somewhere along the crown, but the gum line gradually recedes as we get older.

## CYCLE II. DENTAL SERVICE ORGANIZATION

### UNIT I. DENTAL SERVICES IN OUR COUNTRY

**Словотворення:** суфікси **-age, -ive, -ary(-ery, -ory)**  
префікси **in-, im-, il-, ir-, un-**

**Граматика:** зворот **there is/are**;  
виокремлення членів речення за допомогою  
підсилювальної конструкції **it is (was, will be)... that**

### LESSON 8

#### Home Assignments

#### I. Remember:

**-age** [ɪdʒ] — суфікс іменника: usage [ˈjuːsɪdʒ] — викорис-  
тання

1) Read and translate:

passage, cartilage, percentage, bandage, language, advantage.



Префікси **un-**, **in-** вказують на заперечення чи відмову того, що виражає корінь слова: usual — звичайний, unusual — незвичайний; organic — органічний, inorganic — неорганічний (**im-**, **il-**, **ir-** — фонетичні варіанти префікса **in-**).

2) *Read and translate:*

undone, unknown, indefinite, ineffective, impossible, irregular.

II. *Read the sentences, translate them and answer the questions:*

A. There is a wide network of dental institutions in our country.  
There are many diseases that affect the mouth.

B. There is no filling in this tooth.  
There are no problems with these materials.

C. Is there a wide network of dental institutions in our country?  
Are there many diseases that affect the mouth?

1. На якому місці обставина в англійському та українському реченнях? 2. З чого починаються англійські речення? 3. Чи перекладається самостійно слово there у звороті there is (there are)? 4. Коли вживається цей зворот? 5. Як перекладається зворот there is (there are)? 6. Який артикль ставиться після звороту there is перед іменником в однині і чи вживається артикль з іменником у множині? (Див. граматичний довідник, стор. 503)

1) *Translate the following sentences.*

1. There are some experiments in fluoridation of water supplies in Ukraine. 2. There are currently 20.000 dentists registered in the United Kingdom. 3. Are there fatalities associated with dental operative procedures? 4. There is one dentist for every 3000 of the population in some regions of England.

III. *Read the sentences and their translation and answer the questions given below:*

1. In our country it is the generative and chronic diseases that

receive increasing attention. — У нашій країні приділяється підвищена увага саме спадковим та хронічним захворюванням. 2. It is the pain and inconvenience of dental disease which cause it to be a troublesome health problem. — Лише біль та всі незручності, пов'язані із захворюванням зубів, є причиною порушення здоров'я. .

Яка конструкція в англійських реченнях відповідає українським словам «саме», «лише»? (Див. граматичний довідник, стор. 505)

2) *Translate the sentences.*

1. It is at this stage that teeth are usually removed 2. It is in modern industrialized countries where sugar consumption often exceeds 50 kg per head of the population each year that dental caries incidence is very high. 3. It is dental decay that usually occurs within a few years of the teeth erupting.

IV. *Remember the pronunciation of the words, translate them and learn.*

abscess	[ 'æbsɪs]	expectation	[ekspek 'teɪʃn]
aid	[eɪd]	generative	[ 'dʒenərətɪv]
appreciate	[ə 'pri:ʃieɪt]	mortality	[mɔ: 'tælɪtɪ]
associate	[ə 'səʊʃieɪt]	obligation	[ɒbli 'geɪʃn]
avoid	[ə 'vɔɪd]	retain	[ri 'teɪn]
chronic	[ 'krɒnɪk]	sepsis	[ 'sepsɪs]
death	[deθ]	troublesome	[ 'trʌblsəm]
dentition	[ den 'tɪʃn]		

V. *Read and translate the text paying attention to the main idea.*

## DENTAL AID

Over a hundred years ago dentistry knocked at the door of the professions and asked for admission as a member. In the previous century a dental abscess still sometimes led to death. Now dental disease and practice of dentistry are not usually associated with mortality. As doctors dentists must recognize their obligations to preserve the health and lives of their patients.



Responsibility doesn't end with the teeth for any dentist - he must remember that for the mouth he is the doctor.

For most people it is the pain and inconvenience of dental disease and the associated sepsis, disfunction and disfigurement which cause it to be a troublesome health problem.

In our country it is the generative and chronic diseases of long standing, of which caries and *periodontal disease*<sup>1</sup> are examples that are receiving increasing attention. It is important to stress that both can be prevented or contained by removing their cause. As expectation rise and *value of a healthy, natural dentition is appreciated*<sup>2</sup>, people are becoming more interested in the possibility of avoiding dental disease and retaining their teeth for life.

### Notes:

<sup>1</sup> *periodontal disease* — захворювання пародонту

<sup>2</sup> *value of a healthy, natural dentition is appreciated* — все більше починають цінувати здорові природні зуби

### Class Assignments

**VI. Exercise 1.** Find in the text English equivalents for the following word combinations.

1. постукати в двері. 2. запросити увійти на правах члена. 3. спричиняти смерть. 4. не бути пов'язаним з. 5. не закінчуватися з. 6. для багатьох людей. 7. привертати увагу. 8. зубний ряд. 9. все більше цікавитися. 10. зберегти зуби на все життя.

**Exercise 2.** Quote the sentences in which these words and word combinations are used in the text.

previous, mortality, to preserve the health and lives, to cause, dental disease, to stress, natural dentition.

**Exercise 3.** Answer the questions.

1. What was the situation in dentistry a hundred years ago? 2. Are dental diseases associated with mortality now? 3. What

must dentists recognize as doctors? 4. Is any dentist responsible only for teeth? 5. What is the main health problem connected with when speaking about dental disease? 6. What diseases are receiving increasing attention? 7. How can caries or periodontal disease be prevented? 8. What are people becoming more interested in?

**Exercise 4.** *Insert articles where necessary.*

1. In ... nineteenth century ... dental abscess led sometimes to death. 2. In Western countries, where ... acute killer diseases of the past have for ... most part been conquered it is ... chronic diseases that receive increasing attention. 3. ... people are becoming more interested in ... possibility of retaining their teeth for ... life. 4. ... dentist must remember that for ... mouth he is the doctor. 5. Caries and periodontal disease are considered as ... chronic diseases. 6. Dentists must preserve ... health and lives of their patients. 7. Periodontal diseases can be prevented by removing ... cause of ... disease.

**Exercise 5.** *Insert prepositions or adverbs.*

1. Now ... our country dental diseases are not associated ... mortality. 2. Dentist's responsibility doesn't end ... the teeth. 3. ... most people dental disease is connected ... pain. 4. People are interested ... the possibility to avoid dental disease and keep their teeth ... life. 5. Nevertheless some dental disturbances led ... death, ... which oral cancer is an example. 6. In modern times there are occasional fatalities in association ... general anaesthesia ... dental treatment. 7. Some fatalities result ... dental operative procedures such as streptococcal bacteraemia in people ... heart valvular defects.

**Exercise 6.** *Put questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text «Dental Aid».*

**Exercise 8.** *Translate into English:*

1. У минулому столітті стоматологічні захворювання інколи



спричиняли навіть смерть. 2. Тепер зовсім інший стан речей. 3. Проте випадки летальності внаслідок захворювань щелепно-лицьової ділянки все ж трапляються, одне з них — рак. 4. Стоматолог — лікар, котрий відповідає за лікування всієї ЩЛД, а не лише зубів. 5. Зараз стоматолог несе відповідальність за здоров'я своїх пацієнтів нарівні з іншими лікарями. 6. Переважна більшість відвідування стоматолога пов'язує з болем. 7. Все більшу увагу привертають сьогодні хронічні захворювання, серед них і пародонт. 8. Якщо не усунути причину, внаслідок якої виникає карієс, то лікувати його буде важко. 9. Наше покоління все більше виявляє бажання зберегти свої власні зуби здоровими протягом всього життя .

**Exercise 9.** *Read the text and retell it.*

The dentist is a very important figure in public health. The fully-qualified dentist is a highly-trained professional, who has the skill and knowledge to plan and carry out the most complicated treatment that may be needed by patient's teeth and surrounding structures of the mouth. The work of the dentist consists of making diagnoses, prevention treatment of dental and oral diseases, the examination of teeth and oral cavity, using X-rays and other diagnostic tools as necessary, the preparation to execution of a plan of treatment leading to full restoration of oral health.

**Exercise 10.** *1) Make up short stories on these topics.  
2) Write a story on one of the topics.*

**1. DENTAL AID A HUNDRED YEARS AGO. 2. DENTISTS' RESPONSIBILITIES. 3. DENTAL AID NOW.**

## **LESSON 9**

### **Home Assignments**

#### **I. Remember:**

За допомогою суфікса **-ive** утворюються прикметники від дієслів: prevent — запобігати; preventive — запобіжний, профілактичний.

1) *Read and translate:*

collective, active, effective, impressive, reparative, curative, restorative, operative, conservative, preventive.

2) *Read and translate the word combinations:*

preventive outlook, reparative work, curative dental work, preventive field, preventive measures, reparative and restorative requirements, post-operative trauma, reconstructive surgery, conservative and preventive treatment.

II. *Read and translate the text.*

## **DENTAL SERVICES IN OUR COUNTRY**

All *kinds*<sup>1</sup> of dental aids in our country are rendered at state-owned medical institutions - dental clinics, dental departments at district polyclinics, at schools. Private *practice*<sup>2</sup> also exists. One can speak about a basic preventive *outlook*<sup>3</sup>.

In the preventive field careful studies are being done by our dentists. They regard good hygiene, rational feeding and healthy diet, the prevention of infections and chronic diseases as the most important general preventive measures against dental infection.

We have various experiments in fluoridation of water *supplies*<sup>4</sup> going in Ukraine. It is necessary to know more regarding control of individual dosages and effects in various age groups.

The general dental services cover the ordinary *routine*<sup>5</sup> reparative and restorative requirements. The work of dentists is good in oral surgery, especially in the reconstructive surgery of the face.

The country has set up state dental service for children. In the towns the paedodontic surgery is the basic unit. There the number of dentists is proportional to the number of children under care and is laid down by law.

The variety and range of research work is also impressive in our country.



## Notes.

1. **kinds** — види (=types)
2. **private practice** — приватна практика
3. **outlook** — точка зору (=point of view)
4. **water supplies** — водопостачання
5. **routine** [ru'ti:n] — усталений порядок

## Class Assignments

III. **Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

стоматологічна допомога, існувати, ділянка профілактики, запобіжні заходи, насичення водопроводною води фтором, індивідуальне дозування та вплив, різні вікові групи, вимоги щодо відновлення та лікування, державна стоматологічна служба, дитяча стоматологія, кількість стоматологів, дослідницька робота.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

state-owned medical institutions, private practice, careful studies, dental infection, various experiments, ordinary routine, to be laid down by law, variety.

**Exercise 3.** *Answer the questions.*

1. Where are all kinds of dental aids rendered? 2. What can you say about private practice in our country? 3. What are the most important general preventive measures against dental infection? 4. What experiments are going in Ukraine? 5. The general dental services cover the ordinary routine reparative and restorative requirements, don't they? 6. How can you characterize the work in oral surgery? 7. Where is the paedodontic surgery the basic unit? 8. What is the number of dentists there? 9. Is the variety and range of research work impressive in our country?

**Exercise 4.** *Match the following words logically.*

- a) illness, to cure, sphere, outlook, kind, general
- b) local, field, to treat, type, disease, point of view.

**Exercise 5.** *Insert the missing words given below.*

1. The full university course for a degree in dentistry takes a minimum of five ... . 2. There exists a basic preventive ... . 3. Reparative or curative dental work is ... by dentists. 4. We have a well-established system of children's ... in the cities. 5. The dental programme is largely concentrated on ... . 6. In the treatment of gum ... and post-operative trauma, electrotherapy is much used. 7. Oral ... does much in the field of plastic surgery. (surgery, years, diseases, diet, polyclinics, outlook, carried out)

**Exercise 6.** *Insert articles where necessary.*

1. ... dental aids are usually rendered at dental clinics. 2. ... basic preventive outlook exists in our country. 3. The dental programme proposes improvements in ... diet. 4. We are watching experiments in ... fluoridation of water supplies with great interest. 5. Much reparative and restorative work is done with metal crowning of ... teeth. 6. ... work of dentists is very good in the maxillofacial field. 7. In the towns and large villages the paedodontic surgery is ... basic unit.

**Exercise 7.** *Make up ten questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text «Dental Services in our country».*

**Exercise 9.** *Make up sentences using the following words.*

1. prevention, to include, dental programme. 2. fluoridation of water supplies, individual dosage, to watch. 3. to be rendered, at dental clinics, dental aids, and, dental departments, at district polyclinics. 4. in the reconstructive surgery, the work of dentists, to be very good. 5. in our country, to be impressive, research work.

**Exercise 10.** *Translate into English.*

1. Стоматологічну допомогу в нашій країні надають у стоматологічних клініках та стоматологічних відділеннях районних поліклінік. 2. Стоматологічні кабінети обладнано на виробництвах та у навчальних закладах. 3. У нас широка мережа



дитячої стоматологічної допомоги. 4. Зараз з'явилося й приватне стоматологічне обслуговування. 5. У нашій країні головна увага приділяється запобіганню стоматологічним захворюванням. 6. Стоматологічна програма переважно сконцентрована на правильному харчуванні, гігієні та інших заходах профілактики. 7. Стоматологи допомагають відновити стоматологічне здоров'я пацієнтів. 8. Коло дослідницьких робіт в стоматології широке й різноманітне.

**Exercise 11.** a) *Make up stories on these topics, b) Write a story on one of them.*

1. **DENTAL SERVICES IN OUR COUNTRY AS PREVENTIVE MEASURES.**
2. **THE GENERAL DENTAL SERVICES.**
3. **DENTAL SERVICE FOR CHILDREN.**

## LESSON 10

### Home Assignments

I. 1) *Translate and learn the following words.*

complication	[.kəmpli'keɪʃn]	manifestation	[.mænɪfɛ'steɪʃn]
to evoke	[ɪ'vəʊk]	objective	[əb'dʒektɪv]
interfere	[ɪntə'fɪə]	predispose	[.pri:di'spəʊz]
interrupt	[.ɪntə'rʌpt]	promote	[prə'məʊt]
maintain	[meɪn'teɪn]	rehabilitation	[.ri:həbɪlɪ'teɪʃn]

2) *Translate the sentences with the new words:*

1. The supreme objective of the dental profession should be to eliminate the necessity for its own existence.
2. First of all one should find out the factor which predispose to disorders of the organism.
3. The manifestations of the disease were evident.
4. Sometimes it is difficult to eliminate factors interfering with rehabilitation.

**Exercise 3.** Find the translation of the following word combinations:

головне завдання

the complications of disease

гостре захворювання

the main task

хронічна стадія

the acute disease

ускладнення захворювання

a chronic stage

гігієна ротової порожнини

restorative procedures

рання діагностика

early diagnosis

відновлювальні заходи

mouth hygiene

**II.** Read the text and say:

1. What factors to be prevented are given in the text?
2. What does prevention include?

### **PREVENTIVE DENTISTRY IN THE SYSTEM OF DENTAL SERVICES**

Preventive dentistry is a large component of dental public health service. The objectives of preventive dentistry *are to prevent*<sup>1</sup>:

- (1) factors which predispose to disease;
- (2) the disease itself;
- (3) factors which evoke more severe manifestations of acute disease;
- (4) factors which tend to maintain disease in a chronic stage;
- (5) the complications of disease;
- (6) factors which interfere with rehabilitation.

The correct use of dental services can aid in the control and treatment of the disease and the health of the mouth - can be improved by taking these correct steps. Various steps of prevention should include:

- (1) measures to promote positive oral and general health, such as improved nutrition and mouth hygiene;
- (2) the application of specific preventive measures, such as fluoridation;
- (3) early diagnosis and treatment;
- (4) measures to interrupt the progress of disease, such as restorative procedures;
- (5) measures which will contribute to rehabilitation, such as pros-



thetic services.

Health education is of great importance in preventive dentistry. When educating people dental health message should include at least four simple pieces of advice:

- (1) insist on fluoridation;
- (2) restrict food and drink containing sugar to mealtimes;
- (3) clean the teeth and gums thoroughly every day;
- (4) use a fluoride toothpaste.

Dental health education should always be considered as part of general health education. Only then it will become more effective and scientifically correct.

### **A note.**

<sup>1</sup> *are to prevent* — мають запобігати.

## **Class Assignments**

**III. Exercise 1.** *Find in the text English equivalents for these words and word combinations.*

1. профілактична стоматологія. 2. мета. 3. фактори, котрі спричиняють захворювання. 4. гостра форма захворювання. 5. хронічна форма захворювання. 6. ускладнення. 7. бути на заваді до видужання. 8. покращений за рахунок. 9. включати. 10. покращене харчування. 11. припинити розвиток захворювання. 12. сприяти видужуванню. 13. чотири прості поради. 14. приймати їжу. 15. освіта щодо збереження стоматологічного здоров'я.

**Exercise 2.** *Answer these questions.*

1. Is preventive dentistry a large component of dental health service? 2. What objectives of preventive dentistry do you know? 3. What can the correct use of the dental service aid in? 4. What steps should preventive dentistry include? 5. Why is health education important? 6. When will it be effective? 7. What should dental health message include?

**Exercise 3.** *Finish the sentences.*

1. The tasks of preventive dentistry are ... . 2. Dental services can

help in ... 3. The health of the mouth can be improved by ... .  
4. Various steps of prevention are ... . 5. Dental health education  
is ... . 6. One should follow at least four ... . 7. As part of gener-  
al health education dental health education will become ... .

**Exercise 4.** *Make up sentences, using the active words and word combina-  
tions given below.*

a) to be, preventive dentistry, of, the objectives, to prevent, fac-  
tors, disease, predispose, which, to, one of.

b) steps, to improve, various, the health of the mouth, include,  
treatment, and, early diagnosis, other measures.

c) should, dental health message, to include, pieces of advice,  
simple, four, at least.

**Exercise 5.** *Insert preposition and adverbs where necessary.*

1. One ... the tasks of preventive dentistry is to prevent the com-  
plications of disease. 2. The proper use of the dental services will  
help ... the treatment and control of the disease. 3. Measures  
which interrupt the progress of disease should be taken ... pre-  
ventive dentistry. 4. Clean the teeth and gums ... using a fluoride  
toothpaste. 5. Dental health education is a part ... general health  
education.

**Exercise 6.** *Make up questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Read the text and say about the significance of tooth-brushing for  
dental health.*

It is known that *dental decay*<sup>1</sup> can be reduced by removing the  
dental plaque and it would be expected that regular toothbrush-  
ing would reduce dental caries. However, there is little evidence  
to show that this is the case. It is probable that most decay  
occurs on areas of the tooth surface not accessible to a tooth-  
brush. Regular oral hygiene is important in health of the gums.  
Although toothbrushing in itself has little effects on dental decay,  
fluoride toothpastes have a limited but real effect. The value of a  
toothbrush in the fight against dental decay is, therefore, largely  
as an agent for applying a fluoride toothpaste to the surfaces of  
the teeth.



## A note

<sup>1</sup> *dental decay* — карієс

**Exercise 9.** *Translate into English.*

1. Завдання профілактичної стоматології дуже важливі й різноманітні. 2. Одним з таких завдань є запобігання факторам, котрі спричиняють хронічні стадії захворювання. 3. Правильне стоматологічне лікування передбачає заходи, котрі сприяли б відновленню здоров'я пацієнта. 4. Такі спеціальні запобіжні заходи, як фторування води, сприятимуть збереженню здоров'я ротової порожнини. 5. Обмежене вживання їжі та напоїв із вмістом цукру є одним із заходів запобігання карієсу. 6. Не кожен знає, як правильно чистити зуби, вважаючи це лише естетичним заходом, а не запобіжним щодо захворювання ротової порожнини. 7. Дотримання правильної гігієни ротової порожнини сприяє запобіганню стоматологічним захворюванням.

**Exercise 10.** *Make up statements on the topics.*

1. **THE OBJECTIVES OF PREVENTIVE DENTISTRY.**
2. **STEPS OF PREVENTION.** 3. **DENTAL HEALTH EDUCATION.**

**Exercise 11.** *Speak on the topic:*

### **PREVENTIVE DENTISTRY IN THE SYSTEM OF DENTAL SERVICE.**

## Lesson 11

### Home Assignments

#### **I. Remember:**

За допомогою суфіксів **-ary(-ery, -ory)** [əri] утворюються іменники та прикметники: surgery [ˈsɜ:dʒəri] — хірургія; necessary [ˈnesəsəri] — необхідний.

1) *Read and translate:*

dispensary, primary, secondary, alimentary.

II. 1) *Read and translate the medical terms.*

aetiology	[i:ti' ɔlədʒi]	polyclinic	[pəlɪ klinik]
anodyne	[ʔænoudain]	procedure	[prə'si:ɔʒə]
denture	[dɛntʃə]	restorative	[re'stɔ:rətiv]
palpation	[pæl' peɪʃn]	test	[test]
pathogenesis	[.pæθo'dʒenisis]	visual	[vɪzjuəl]

2. *Read, translate and learn the following words and word combinations.*

bite	[bait]	fit	[fɪt]
dental surgery	[sə:ɔʒəri]	history taking	
determine	[dɪ'tə:mɪn]	perform	[pə'fɔ:m]
discover	[dɪs' kʌvə]	reveal	[ri' vi:l]
fear	[fiə]	sensation	[sen'seɪʃn]

3) *Insert the necessary words given below.*

1. A stomatological polyclinic is well-planned and ... . 2. In any polyclinic there are some ... . 3. The specialists of the polyclinic perform all ... . 4. First of all it is necessary to make a correct ... . 5. Different procedure ... to establish a diagnosis. 6. Tooth treatment is sometimes a very ... procedure. 7. With an early stage cavity the tooth is usually ... right without any pain. 8. Dentists are investigating new ... of dental treatment. 9. The causes of ... are very difficult to be determined. (dental surgeries, diagnosis, painful, to be used, to be set, kinds of dental work, comfortable, caries, techniques).

III. *Read the text and divide it into logical parts.*

## AT THE STOMATOLOGICAL POLYCLINIC

Dental aid is usually rendered at stomatological polyclinics. As a rule a stomatological polyclinic is well-planned and comfortable. It has all *modern conveniences*<sup>1</sup>. There are many den-



tal surgeries, a laboratory, an X-ray room, an *electropathic room*<sup>2</sup> and other rooms here. Many specialists work here. They perform all kinds of dental work: the treatment of diseases of the dental pulp, extractions and performance of laboratory tests, correcting the bite, the treatment of gum diseases, the design and fit of bridgework and dentures to replace missing teeth, all kinds of restorative work. Before the treatment of a disease it is necessary to make a diagnosis, determine its aetiology, pathogenesis as well as the symptoms by which it can be revealed.

A number of different procedures are used to establish a diagnosis: history taking, physical examination, which includes visual examination, palpation, laboratory studies, instrumental studies, for example, X-ray examination and others.

Dental treatment is at times a very painful procedure. If a cavity is discovered at an early stage, the tooth can be set right without any pain. Only *when it is neglected*<sup>3</sup> the patient has some unpleasant sensations. Dentists try to do something about this. They involve new methods of dental treatment and new anodynes. Soon people will forget all about their fears.

## Notes

<sup>1</sup> ***modern conveniences*** — сучасні зручності;

<sup>2</sup> ***an electropathic room*** — фізіотерапевтичний кабінет;

<sup>3</sup> ***when it is neglected*** — коли вона (порожнина) занедбана.

## Class Assignment

**IV. Exercise 1.** Find in the text English equivalents for these words and word combinations.

1. як правило. 2. всі сучасні зручності. 3. рентген-лабораторія. 4. корекція прикусу. 5. немає зубів. 6. мости і зубні протези. 7. поставити діагноз. 8. низка процедур. 9. збирання анамнезу. 10. без болю. 11. неприємний. 12. анестетик. 13. забувати.

**Exercise 2.** Quote the sentences in which the following words and word combinations are used in the text.

to be rendered, an electropathic room, gum diseases, instru-

mental study, at times, to be discovered, to be neglected, to do something about, soon.

**Exercise 3.** *Answer these questions.*

1. Where is dental aid usually rendered? 2. What does any dental clinic have? 3. What kinds of dental work do dentists perform? 4. When is it necessary to make a diagnose? 5. What procedures are used to establish a diagnoses? 6. Is dental treatment always painful? 7. When does a patient have unpleasant sensations? 8. Do dentists do anything about it? 9. Why do they use new anodynes? 10. What will people forget about soon?

**Exercise 4.** *Insert articles where it is necessary.*

1. ... stomatological polyclinics are well-planned and comfortable. 2. Any polyclinic has ... dental surgeries, ... laboratory, ... X-room, ... electropathic room and others. 3. ... treatment of diseases of ... dental pulp is very important. 4. Before the treatment one must make ... diagnosis. 5. ... number of different procedures are necessary for making ... diagnosis of caries. 6. If a cavity is treated at ... early stage it can be painless. 7. Unpleasant sensations are connected with ... neglected tooth disorder. 8. Preventing tooth decay is ... very difficult problem.

**Exercise 5.** *Using the following words make up sentences.*

1. different, many, to help, procedures, to make, a, diagnosis, correct.
2. polyclinic, the, of, dentists, the, kinds, perform, all, of, work, dental.
3. treatment, to be, tooth, a, procedure, sometimes, very, painful.
4. try, treat, to, dentists, any, without, pain, new, using, anodynes, the, patients.

**Exercise 6.** *Make up 10 questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*



**Exercise 8.** *Read the text, translate it using a dictionary. Describe the dental surgery in short.*

### **AT THE DENTAL SURGERY**

The dentists treat the patients at dental surgeries. A modern dental surgery is a large and light hall. One can see some universal equipment here to fulfill the needs of the dentist. First of all there are units including engines with arm-chairs for the patients. These are quite modern easy-to-use dental unit systems. The patients can sit or lie in the arm-chair. There are also small chairs for the dentists, they are movable and comfortable. There is an instrument table or an instrument holder near every arm-chair. It can be easily moved to be at the dentist's disposal. You can see some instruments on it. Usually there is a tray with a set of instruments such as: an explorer, a mixing pad, a pincett, a dental mirror, a probe and some others.

There are also instrument cupboards with many instruments in them. We can see temporary filling materials, composites, cements, glass-ionomers, bonding systems for restoration work; reamers, files, paper and guttapercha points, seals for endodontics; splints, trays, matrixes, impression materials for orthopaedic work; dental cotton rolls, rubber dam, prophy paste, saliva ejector for hygienic purposes. Hygiene is very important in the work of a dentist, that's why all the instruments are carefully cleaned or disinfected.

**Exercise 9.** *Translate into English.*

1. Якщо у пацієнта болить зуб, то він іде до стоматологічної поліклініки. 2. В стоматологічній поліклініці надаються різні види допомоги. 3. В стоматологічній поліклініці обладнано кілька стоматологічних кабінетів, де лікарі лікують захворювання пульпи, відновлюють хворі зуби, роблять протезування, виправляють прикус. 4. Щоб правильно поставити діагноз, треба знати етіологію, патогенез та симптоми захворювання. 5. Фізичний огляд, лабораторні дослідження, рентгенологічні обстеження посідають важливе місце у встановленні діагнозу. 6. Лікування зубів не завжди безболісне. 7. Якщо зуб дуже пошкоджений, то пацієнт зазнає неприємних відчуттів. 8. Стоматологи застосовують анестети-

ки, щоб пацієнти забули про зубний біль. 9. Якщо порожнина невелика і виявлена на ранній стадії, то зуб можна вилікувати без болю, тому варто постійно тримати ротову порожнину у належному стані.

**Exercise 10.** *Speak on these topics.*

## UNIT II. DENTAL SERVICES IN GREAT BRITAIN

### 1. AT THE STOMATOLOGICAL POLYCLINIC. 2. A VISIT TO THE DENTAL SURGERY.

## LESSON 12

### Home Assignments

I. 1. *Remember the pronunciation of the words.*

authority	[ɔːθɔːrəti]	orthodontics	[.ɔːθəˈdɒntiks]
contribution	[.kɒntriˈbjʊːʃn]	practitioner	[prækˈtɪʃənə]
general	[ˈdʒenərəl]	pressure	[ˈpreʃə]
majority	[məˈdʒɔːrɪti]	priority	[praɪˈɔːrɪti]
maxillofacial	[.mæksɪləˈfeɪʃəl]	register	[ˈredʒɪstə]

2. *Read, translate and learn the following words and word combinations.*

appropriate	[əˈprɒpriət]	to be held	[held]
bleeding	[ˈbliːdɪŋ]	to be obliged	[əˈblaɪdʒd]
currently	[ˈkʌrəntli]	to be	
		remunerated	[riˈmjʊːnəreɪtɪd]
emergency	[ɪˈmæːdʒensi]	restriction	[riˈstrɪkʃn]
expectant	[ɪksˈpektənt]	salary	[ˈsæləri]
mother			
guarantee	[.gærənˈtiː]	stay	[steɪ]
handicapped	[ˈhændɪkæpt]		

**Exercise 3.** *Translate the word combinations.*

general service, general practice, general practitioner; curative treatment, rehabilitative treatment, course of treatment, dental treatment, restorative treatment, emergency treatment; dental



service, National Health Service, community service, medical service, hospital dental service.

**Exercise 4.** Match the following words logically.

- a) expectant (mother), salary, ache, painful, independent, adult;
- b) remunerate, pain, dependent, child pregnant, painless.

**II.** Read the text, translate it, compose the plan of the text.

## **THE ORGANIZATION OF DENTAL SERVICES IN THE UNITED KINGDOM**

There are currently over 20 000 dentists *registered in the United Kingdom*<sup>1</sup>. The majority work within National Health Service. Some 80% of dentists work as independent contractors in the *general service*<sup>2</sup>, around 10 per cent work in the salaried community service and only 7% are employed in hospitals. The number of dentists per head of population in Britain is around 1 to 3 500.

Dentists in general practice work on a fee for item of service basis and paid for courses of treatment completed. The service is oriented to curative and rehabilitative treatment rather than prevention.

In contrast to the general medical service, there are no restrictions on where dentists may practice and *their lists are not closed*<sup>3</sup>. Patients do not register with a particular practitioner but may seek a course of dental treatment wherever they can obtain it. While the NHS guarantees everyone a doctor, no one is guaranteed a dentist.

Adult patients are obliged to pay a contribution towards the cost of routine dental treatment with higher charges for dentures and some of the more costly items of restorative treatment. Some items such as examination and report, arrest of bleeding are free under the NHS.

General practitioners' contracts are held by Family Practitioner Committees of Area Health Authorities.

Dentists working in the community service are remunerated by salary. The service is organized on an area basis in clinics and health centres and is devoted to dental care of defined priority

groups. Priority group patients can obtain dental treatment free of charge. These groups include children of all ages, expectant and nursing mothers and handicapped adults. Because community dental officers *are not subjected to the same demanding economic pressures* <sup>4</sup> as their colleagues in general practice, they have more time to devote to children and to balance the curative treatment they provide with appropriate prevention.

The hospital dental service provides specialist consultant advice and treatment in oral and maxillofacial surgery, orthodontics and restorative dentistry. In addition it has responsibility for routine dental care for long stay hospital patients and the emergency treatments of short stay patients.

## Notes

<sup>1</sup> **registered in the United Kingdom** — занесені до списку стоматологів Об'єднаного Королівства. Стоматолог не може розпочати працювати доти, доки його ім'я не занесене до загального списку країни. Цим списком завідує Генеральна стоматологічна рада. До загального списку заноситься ім'я лікаря, його адреса та кваліфікація кожного, хто має намір практикувати у Великобританії;

<sup>2</sup> **general service** — практика загального профілю;

<sup>3</sup> **their lists are not closed** — їх списки не закриті. У зв'язку з тим, що в Англії не вистачає стоматологів, їх не обмежують у виборі місця роботи (на відміну від лікарів медичного профілю);

<sup>4</sup> **are not subject to the same economic pressures** — не зазнають таких економічних обмежень. Стоматолог, котрий працює в національній системі стоматологічної допомоги має обмеження щодо матеріалів для лікування пацієнтів та часу, відведеного на кожного пацієнта.

## Class Assignment

III. Exercise 1. Find in the text English equivalents for these words and word combinations.

1. більшість. 2. працювати за індивідуальним контрактом.



3. районна громадська служба. 4. кількість лікарів-стоматологів. 5. плата за надані види послуг. 6. на противагу. 7. пацієнти не закріплені за певним лікарем. 8. дорослі пацієнти. 9. зупинення кровотечі. 10. одержувати платню. 11. безкоштовно. 12. відповідна профілактика. 13. стоматологічне обслуговування при клініці. 14. невідкладне лікування.

**Exercise 2.** *Quote the sentences in which the following words and word combination are used in the text.*

Currently, salaried community service, per head, to complete, to be oriented, restriction, to guarantee, item, area basis, nursing mother, maxillofacial surgery, short stay patient.

**Exercise 3.** *Answer these questions.*

1. How many dentists are registered currently in the UK? 2. Where do the majority work? 3. How many of the dentists are employed in hospitals? 4. What is the number of dentists per head of population? Is it high or low from your point of view? 5. How are dentists in general practice paid? 6. What is the service oriented to? 7. Are there any restrictions on where dentists may practice? 8. Do patients register with a particular practitioner or may they seek any dental treatment? 9. Does the NHS guarantee everyone a dentist? 10. What contribution are adult patients obliged to pay? 11. What items are free? 12. By what organ are general practitioners' contracts held? 13. What do you know about community service dentists' pay? 14. Where do they usually work? 15. What patients do priority groups include? 16. Why can these dentists balance the curative treatment with appropriate prevention? 17. What service does the hospital specialist provide?

**Exercise 4.** *Insert prepositions where necessary.*

1. The majority of doctors registered in Great Britain work ... the NHS. 2. The dentist today can't practise his profession until his name has been entered ... the Dentists Register. 3. The registered dentist has a wide choice of opportunities ... his profession. 4. There are no restrictions ... where dentists may practice, it

may be general practice, school dental service, hospital service, university teaching and research, industrial dental service and the armed forces. 5. A patient doesn't register ... a particular dentist. 6. The cost for dental treatment is higher ... dentures and restorations using modern high quality materials. 7. Community service dentists are paid ... salaries. 8. They have more time to devote ... children. 9. Dentists of the hospital dental service are responsible ... the emergency treatment ... short stay patients.

**Exercise 5.** *Insert articles where necessary.*

1. The General Dental Council is ... governing body of the dental profession. 2. Dentists registered by ... General Dental Council may describe themselves as ... dentists, ... dental surgeon, or ... dental practitioner. 3. ... dentist may also become ... specialist in a particular branch of industry taking additional higher qualifications. 4. Community service dentists are not subjected to ... same economic pressures as contractors in the general service. 5. ... cost of dental treatment in the UK is low compared with many other countries. 6. Dentists employed in the community service screen ... children in schools for dental care needs. 7. Specialist orthodontic treatment is available from ... community dental service.

**Exercise 6.** *Make up twelve questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Зараз у Великобританії налічується понад 20 000 офіційно зареєстрованих стоматологів. 2. В Об'єднаному Королівстві лише ті стоматологи, котрі є в списках Генеральної стоматологічної ради, можуть займатися стоматологічним лікуванням. 3. Більшість з них працює за контрактом у Національній Службі Охорони Здоров'я. 4. У Великобританії є й приватна стоматологічна практика. 5. Стоматологи загального профілю, котрі працюють у громадській охороні здоров'я, одержують платню відповідно до наданих послуг після закінчення лікування. 6. В Англії стоматолог легко може знайти собі роботу, оскільки в країні не вистачає таких спеціалістів. 7. 10% стоматологів працюють у районних гро-



мадських службах, де одержують певну заробітну платню. 8. Вони безкоштовно лікують такі групи населення, як діти, вагітні жінки, та ті, що годують дітей груддю, інваліди та пенсіонери. 9. Крім цього, вони слідкують у школах за станом ротової порожнини дітей. 10. Стоматологічне обслуговування здійснюють і стоматологи, котрі працюють при клініках. 11. Як правило тут надається хірургічна допомога в щелепно-лицьовій ділянці та ортодонтії.

## LESSON 13

### CONVERSATIONS:

#### A. IMPRESSIONS OF A VISIT. B. DENTAL SERVICE ORGANIZATION IN UKRAINE. C. WHAT SHOULD I DO?

### Home Assignments

#### I. Learn this speech pattern.

You **should help** him with this work.

— Ви **повинні** допомогти йому в цій роботі

#### 1) Make up sentences using the table and translate them.

You	should	read more to know the subject better.
He		go to the polyclinic for his annual examination.
They		take care of their child's teeth.
She		visit her dentist immediately.

#### 2) Make up 5 sentences using the pattern.

#### II. Learn these words and word combinations.

attend	[ə'tend]	full	[ful]
comprehensive	[.kəmpri'hensiv]	impression	[im'preʃn]
consequence	[kənsikwəns]	to be regarded	[ri'ga:did]
constitute	[kənstɪtju:t]	severe	[si'viə]
drug	[drʌg]	throughout	[θru:'aʊt]
favour	[feivə]		

### III. *Read and translate the dialogues.*

#### **A. IMPRESSIONS OF A VISIT**

Tim Brown: — Hello, Peter.

Peter Smith: — Hello. How are you?

- I'm Ok, thank you. And what about you?
- I am well, thanks. Have you been away? I phoned you several times but there was no answer.
- Yes, I've just come back from a conference in Bristol.
- How interesting! What were you doing there?
- I attended the conference of dentists.
- You must be full of impressions.
- Yes, indeed. That was a very interesting conference, devoted to the public health significance of dental diseases. The reporters told us about dental treatment of high risk groups for whom the consequences of dental diseases are severe.
- What people belong to these groups?
- People with haemorrhagic disorders, severe cardiac and respiratory conditions and patients receiving therapy with a number of specific drugs must among others be regarded as high risk groups.
- And what about people with heart valvular defects?
- Yes, some of them are in need of comprehensive preventive dental care throughout life.

#### **B. DENTAL SERVICE ORGANIZATION IN UKRAINE**

Bernard Law: — I hear that all kinds of dental aid in your country are rendered at state-owned medical institutions.

Nickolai Steshenko: — Yes, you are right. But we can say that private practice also exists.

- Are patients obliged to pay for the treatment?
- At dental polyclinic all kinds of conservative and preventive treatments are free. Prostheses must be paid for at



cost. Dentists get salaries, but private practitioners are paid for courses of treatment by the patients.

- Is the dentist restricted in the choice of his work?
- Yes, the number of dentists is proportional to the number of patients under care and is laid down by law.
- And what about hospital dentistry?
- Unlike the medical services, hospital dentistry though constituting an important specialist service, occupies but a small proportion of the total dental work force.
- Is any patient free to choose his own dentist?
- Yes, but a full choice is not always possible, because sometimes the cost can be a barrier to the receipt of care.

### **C. WHAT SHOULD I DO?**

Boris: — Andrew, could you do me a favour?

Andrew: — I'll be glad to if I can.

- I have a toothache and can not make up my mind where to go: to the polyclinic or to the private dental surgery. What would you advise me as dental student?
- Well, that depends. Of course there are good dental surgeries in our town. But not all of them render all kinds of dental aid. At the dental polyclinic you can find specialists in different fields of dentistry: endodontics, oral pathology, orthodontics, periodontics, prosthodontics and others. Besides there are a lot of dental surgeries here performing all kinds of dental work, a laboratory, an X-ray room and an electropathic room. You can get all the treatment you need here.
- But going to the dentist's is not a pleasure. I'm afraid I have neglected my tooth.
- Forget about unpleasant sensations. Our dentists use anodynes. It won't hurt. Then you should have your tooth treated at once. In a private dental surgery you should make an appointment with the dentist in advance, I think. That's why I'd recommend you to go to the polyclinic for the emergency treatment.

## Class Assignments

**IV. Exercise 1.** *Find in the dialogues English equivalents for these word combinations and sentences.*

1. як ти себе почуваєш? 2. ти від'їжджав? 3. бути присутнім на конференції. 4. сповнений вражень. 5. наслідки захворювання. 6. специфічні ліки. 7. група підвищеного ризику. 8. протягом усього життя. 9. за собівартістю. 10. бути обмеженим. 11. невелика частина. 12. цілковитий вибір. 13. зроби послугу. 14. це залежить від багатьох причин. 15. лікування, котрого ти потребуєш. 16. боляче не буде. 17. заздалегідь.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the dialogues*

several times, indeed, severe, in need, exist, prostheses, to be restricted, unlike, glad, depend, pleasure, at once, make an appointment.

**Exercise 3.** *What would you say if you took part in these dialogues? Dramatize them.*

1. — Good morning, Mr. Burns.

— ...

— I am all right, thank you. And how are you?

— ...

— Yes, I've just returned from a scientific congress.

— ...

— I took part in it and delivered a report.

— ...

— Yes. That was sponsored by the Academy of Sciences and many international participants took part in it.

2. — Could you do me a favour, Peter?

— ...

— I have an awful pain in my lower tooth on the right. Have a look at it. Should I go to the dentist?

— ...

— But I am not sure if I can make an appointment with my



dentist now. And I am afraid to go to the dentist.

— ...

3. — I hear that you have only state-owned dental institutions in your country.

— ...

— Are patients free to choose their own dentists?

— ...

— Are patients obliged to pay for their treatment?

— ...

**Exercise 4. Act as interpreter.**

1. — Hello, Jack.

— Привіт, Ренді.

— How are you ?

— У мене все гаразд. А як справи у тебе?

— I am Ok, thank you. I haven't seen you for ages. Have you been away?

— Так, я щойно повернувся з міжнародного форуму.

— How interesting! You must be full of impressions.

— Звичайно. Форум був присвячений проблемам щелепно-лицевої хірургії, доповіді були цікавими.

— I know you are interested in maxillofacial surgery.

— Так, мені дуже сподобалися виступи більшості вчених. Дослідницька робота в цій галузі вражає .

2. — Привіт, Миколо!

— Hello, Alex. What are you doing here?

— Я тут працюю стоматологом. А ти в якій тут справі?

— I have fractured my tooth and want to see a dentist.

— Я тобі порадив би спочатку зробити рентгенівський знімок зламаного зуба, а потім вже йти на консультацію до лікаря.

— Where can I have it X-rayed?

— Рентгенкабінет розташований на другому поверсі.

Сподіваюся, зуб можна відновити. Коли знімок буде готовий, приходь до мене в 206-й кабінет. Я намагтимусь зробити все можливе.

— Thank you, Alex. That's very kind of you.

3. — Hello, Mr. Brown.

— Добридень, пане Петрушанко.

- I hear you have tooth troubles. Can I help you?
- Розумієте, я ніяк не наважуся піти до стоматологічної клініки. Я боюся зубного болю.
- If you neglect your tooth you'll have unpleasant sensations, but if the cavity is at an early stage the tooth can be set right without any pain.
- У вашій країні теж черги до стоматолога?
- If you go to the polyclinic you'll get the emergency treatment immediately.
- Чи можу я сам обрати собі стоматолога?
- Yes, but you must make an appointment in advance.

**Exercise 5.** *Translate the dialogues.*

1. — Здоров, Петре.  
 — Здоров, Олеже. Радий тебе бачити. Я телефонував тобі минулого тижня, але мені відповіли, що ти у відрядженні.  
 — Так, я щойно повернувся з Харкова.  
 — З якої нагоди?  
 — Я був на стоматологічній виставці.  
 — Мабуть, ти сповнений вражень.
2. — Ти брав участь у науковій конференції нашої академії?  
 — Так, конференція зацікавила багатьох. Доповіді були присвячені проблемі фторування води і здоров'я зубів.  
 — Ой, як цікаво! Я чув, що в Україні проводяться дослідження в цій галузі.  
 — Так, для водопостачання нашого міста питання про вміст фтору у воді завжди залишається відкритим.
3. — Привіт, Андрію.  
 — Здоров, Теде. Чув, що ти працюєш у приватному стоматологічному кабінеті.  
 — Так, я працюю там за контрактом.  
 — Ти задоволений?  
 — Звичайно. У нас найсучасніше устаткування, все дуже зручно й комфортабельно.  
 — У вас багато пацієнтів?  
 — Завдяки попередньому записові на прийом я знаю свій розпис на тиждень.  
 — А чи дуже дорого коштує лікування?



- Порівняно з іншими країнами — ні. До того ж наші пацієнти не бояться зубного болю, оскільки всі процедури знечуються.

**Exercise 6.** *Make up dialogues based on these situations.*

**1. IMPRESSIONS ON THE STUDENT'S SCIENTIFIC CONFERENCE. 2. DENTAL SERVICE ORGANISATION IN GREAT BRITAIN. 3. AT THE DENTAL SURGERY.**

## **LESSON 14**

### **REVISION**

#### **Class Assignments**

**I.** *Find suffixes and prefixes in the following words and translate them.*

bandage, indefinite, impossible, impressive, repairative, conservative, percentage, preventive.

**II.** *Supply extended answers:*

1. What must a dentist recognize as doctors? 2. Where are all kinds of dental aid rendered? 3. What are the objectives of preventive dentistry? 4. When can tooth treatment be painless? 5. What instruments can be found in the instrument cupboard? 6. Where may dentists work in the United Kingdom after the registration?

**III.** *Read and translate the text using a dictionary.*

### **THE CHANGE FROM STATE-FUNDED TO PRIVATE DENTISTRY**

The choice between state-founded and private dentistry for any dentist is not an easy one. One must take into account many factors when taking such a step, not only financial, but also ethical and moral. Such a dilemma has had to be faced by the majority of dentists in the United Kingdom over the last years.

Traditionally since late 1940's the UK has had a comprehensive, state-funded health care system, where all kinds of health service were funded by the state and were free of charge. The British were proud of their National Health Service. Unfortunately partly due to the lack of financial resources and partly due to ever increasing demand and expectation by the recipients of these services, this idyllic situation began to be compromised. This was particularly true when it came to the situation relating to dentistry. Originally the situation was that the dentist was allowed and able to provide whatever treatment he considered to be appropriate to the case in question and the treatment would be adequately remunerated. Then, ever-increasing financial and bureaucratic restrictions took the form of decreased remuneration for the items of work carried out, restrictions on the types of procedures allowed, restrictions on the materials allowed, as well as the amounts of treatment allowed in a course of a treatment. Eventually the situation was reached where in order to remain financially viable, dentists were having to perform treatment ever-more rapidly, see more patients and spend less time with each of them. The dentists were forced to use cheaper materials and laboratories. They were unable to afford reequipment of their practices to keep up with current world standards. The patients also were dissatisfied with the quality of service which they were offered. The solution of this dilemma was to offer the patients private dentistry.

**IV.** *Answer the questions in a written form.*

1. Why is the choice between state-founded and private dentistry not an easy one? 2. What system has the UK had since late 1940's? 3. Were the British proud of it? 4. Why did this situation begin to be compromised? 5. What was the situation in dentistry originally? 6. Why were dentists not allowed to do the work as they would like to? 7. Were the patients also dissatisfied with the quality of service? 8. What was the solution of this dilemma?

**V.** *Write 10 sentences on the topic «DENTAL SERVICES IN OUR COUNTRY». Be ready to speak on this topic.*



## CYCLE III. GENERAL PART

### Unit I. THERAPEUTIC DENTISTRY. CARIES. FIRST STEPS IN ENDODONTICS.

Словотворення: суфікси **-ous, -ance, -ence, -ant, -ent, -ness, -able, -ible, -less, -ate.**

Граматика: складний підмет.

### LESSON 15

#### Home Assignment

##### I. Remember:

За допомогою суфіксів **-ance, -ence** утворюються іменники: to enter — входити, вступати; entrance — вхід; вступ

1) Read and translate:

significance, difference, evidence, adherence, presence, importance, menace.

За допомогою суфікса **-ous** [əs] утворюються прикметники від іменників та дієслів: fame — слава, відомість, популярність; famous [ˈfeɪməs] — відомий, популярний.

2) Read and translate:

fibrous, numerous, dangerous, obvious.

За допомогою суфікса **-less** утворюються прикметники від іменників і набувають значення відсутності чого-небудь чи якоїсь якості: harm — шкода; harmless — нешкідливий.

3) Read and translate:

useless, helpless, painless, hopeless, careless.

II. *Read the following sentences, compare them with the Russian translation, answer the questions:*

<b>A.</b> Caries is known to be the commonest disease of the civilization.	— Відомо, що карієс — найпоширеніша хвороба цивілізації.
He is said to be ill.	— Кажуть, що він хворий.

1. Які за структурою англійські речення: прості чи складні? 2. Визначте присудки в англійських реченнях. 3. У якому стані присудки англійських речень? 4. З чого починається переклад англійських речень? 5. Як перекладаються присудки на українську мову? 6. В англійських реченнях назвіть частину мови, що йде після присудка. 7. Як перекладається інфінітив: неозначеною чи особовою формою дієслова, тобто присудком? 8. Які слова, зв'язані з інфінітивами, є підметами щодо них? 9. Чи можна сказати, що іменна частина (caries, he) становить з інфінітивом (to be) одне ціле й назвати це ціле складним підметом? 10. Як перекладаються речення зі складним підметом? (Див. граматичний довідник, стор. 506).

**B.** *Pay attention to the predicate voice in the following sentence.*

The pain proved to be sharp	Виявилось, що біль був гострим.
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11. У якому стані присудок? 12. Чи впливає на переклад форма інфінітива? 13. Як перекладаються різні форми інфінітива на українську мову? (Див. граматичний довідник, стор. 506).

1) *Find the complex subject and translate the sentences:*

1. On physical examination the tooth was considered to be far gone. 2. The presence of plaque on the tooth surface is known to be formed due to bacteria and food debris in the stagnation areas. 3. Severe toothache has been estimated to be caused by the irritant action of bacteria and the acid products in the cavi-



ty.

III. 1. Remember the pronunciation of the following words. Find their translation in the right column.

bacteria	[bæk'ʧəriə]	білок
protein	[ˈprəʊti:n]	жир
fat	[fæt]	бактерія
carbohydrate	[.kɑ:bou'haidreit]	кислота
acid	[æsid]	вуглевод
stagnation	[stæg'neɪʃn]	протез
denture	[ˈdentʃə]	застій

2. Translate and learn the following words.

adherent	[əd'hiərənt]	refined	[ri'faɪnd]
consume	[kən'sju:m]	resident	[ˈrezɪdənt]
cavity	[ˈkævɪti]	snack	[snæk]
excessive	[ɪk'sesɪv]	sticky	[ˈstɪki]
fluid	[flu:ɪd]	sugar	[ˈʃʊgə]
harm	[hɑ:m]	white flour	[ˈflaʊə]

IV. Read and translate the text «Causes of Caries». Find the sentences with a complex subject.

## CAUSES OF THE CARIES

Tooth decay or caries is known to be probably the commonest disease of civilization. It is due to acid formation on the tooth surface, dissolving away the enamel and dentine to produce a cavity. Acid is produced by the action of certain bacteria on food remaining on the teeth after meals. These bacteria appears to be normal residents of the mouth and are otherwise quite harmless.

All types of food are classified into three distinct groups—protein, fat and carbohydrate. Of these, only REFINED CARBOHYDRATE is reported to cause caries as it is the only food which can be turned into acid by the bacteria concerned. Refined carbohydrates are SUGAR and WHITE FLOUR, so anything containing these can give rise to caries. Such foods are cake, biscuits, bread, jam

and sweets.

The longer the carbohydrate stays on the teeth, the longer the duration of acid production. Thus sweet fluids, such as tea with sugar, which are washed off the teeth immediately by saliva are not a significant cause of caries. STICKY CARBOHYDRATE is the major cause. Because of its adherent nature it clings to the teeth for a very long time, during which it is being transformed into the acid responsible for dissolving enamel and dentine. Toffee and other sweets, cakes, biscuits, white bread and jam are foremost amongst these sticky carbohydrates which are the cause of caries.

Our modern diet is known to be of such a nature that refined carbohydrate is consumed nearly every time something is eaten; and the teeth are attacked by acid on each of these occasions. If snacks containing sticky carbohydrates are frequently taken between meals there will be a corresponding increase in the number of acid attacks on the teeth. Thus it is evident that excessive consumption of snacks or sweets between meals is one of the most important causes of caries.

## Class Assignments

**V. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. найпоширеніше захворювання. 2. кислотне утворення. 3. зубна поверхня. 4. утворити порожнину. 5. певний вид бактерій. 6. виділені вуглеводи. 7. започаткувати карієс. 8. отже. 9. споживати. 10. між прийманням їжі. 11. одна з найважливіших причин.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

decay, to dissolve away, normal resident, refined carbohydrate, to stay, adherent nature, to be attacked by, frequently, excessive consumption.



**Exercise 3.**     *Answer the questions.*

1. What disease is known to be the commonest disease of the civilization? 2. What is it due to? 3. By what is acid produced? 4. How can all types of food be classified? 5. Why does refined carbohydrate cause caries? 6. What food contains refined carbohydrate? 7. What does the duration of acid production depend on? 8. Are sweet fluids a significant cause of caries? 9. How can you characterize our modern diet? 10. When will there be a corresponding increase in the number of acid attacks on the teeth?

**Exercise 4.**     *Insert articles where necessary.*

... parts of ... tooth where food tends to collect and which are, therefore, most prone to caries are known as STAGNATION AREAS. Occlusal fissures and ... spaces between mesial and distal surfaces of adjoining teeth are ... commonest stagnation areas. That is why ... caries occurs most often on occlusal and mesial or distal surfaces. However, any other part where food debris can accumulate is ... stagnation area where caries is likely to occur. Such ... food traps are ... necks of teeth covered by ill-fitting partial dentures, irregular teeth and unopposed teeth. No harm is caused by partial dentures which fit perfectly, but those which do not are ... menace to dental health. They leave ... spaces between ... necks of the teeth and plastic plate, or between ... clasps and ... teeth, which are dangerous stagnation areas.

**Exercise 5.**     *Insert prepositions where necessary.*

During mastication, food actually helps to clean teeth which are ... normal occlusion. Those which are not, such as irregularly positioned and unopposed teeth, are not exposed ... this beneficial cleansing effect ... mastication. Consequently food collects around these instanding or outstanding irregular teeth. It also covers ... crown ... any tooth which has lost its opposite number, and remains unopposed because the space has not been replaced artificially. To make ... situation even worse, ... food

most likely to produce caries — sticky carbohydrate — needs the minimum amount ... mastication anyway, and therefore has a negligible cleansing effect even ... teeth in normal occlusion.

**Exercise 6.** *Make up ten questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Загальновідомо, що карієс — одне з найпоширеніших захворювань цивілізації. 2. Кислота продукується під дією певного виду бактерій. 3. Лише вуглеводи можуть призвести до карієсу, оскільки вони перетворюються на молочну кислоту. 4. Чим довше вуглеводи залишаються на зубах після приймання їжі, тим триваліша дія кислоти. 5. Ця кислота розчиняє емаль та дентин, спричиняючи утворення порожнини. 6. Наша їжа переважно містить вуглеводи, тому кислота діє на зуби після кожного приймання їжі. 7. Якщо ви споживаєте печиво або цукерки в проміжках між прийманням їжі, то ви ризикуєте захворіти на карієс. 8. Найчастіше карієс виявляється на жувальній, медіальній та дистальній поверхнях зубів. 9. Карієс — патологічний процес, етіологія якого остаточно не з'ясована. Він починається після прорізування зубів і характеризується деструкцією твердих тканин зуба з подальшим утворенням дефекту.

**Exercise 9.** *Read the text «Effects of Caries» and give the annotation of the text.*

## **EFFECTS OF CARIES**

Bacteria and food debris in the stagnation areas form a thin tenacious film called PLAQUE on the tooth surface. Acid forms in this plaque and eats through enamel until it reaches dentine. As enamel has no nerves the first stage is quite painless but once the dentine is breached, caries is then involving the sensitive part of a tooth and pain is liable to occur. Nevertheless pain is not usually felt until caries has extended a considerable way into dentine.

At first the pain only lasts for a short while and is brought on by contact with anything hot, cold or sweet. Later, however, as



a cavity approaches the pulp, toothache becomes more severe and prolonged until eventually the pulp itself becomes inflamed. This condition of PULPITIS is caused by the irritant action of bacteria and their acid products in the cavity. It is very painful and leads to death of the pulp, followed by formation of an ALVEOLAR ABSCESS.

## LESSON 16

### Home Assignments

#### I. Remember:

За допомогою суфіксів **-able, -ible** утворюються прикметники від основи дієслів: changeable — мінливий; **-ate** [eit] — суфікс дієслів: masticate — жувати

1) Read and translate.

comparable, variable, eatable, responsible, extensible, liable; radiate, operate, estimate, circulate.

II. 1. Remember the pronunciation of the following words.

alveolar	[æˈlvioulə]	inflammation	[.ɪnfləˈmeɪʃn]
apical	[ˈæpɪkəl]	pulpitis	[pʌlˈpaɪtɪs]
drainage	[ˈdreɪnɪdʒ]		

2. Translate and learn the following words.

abruptly	[əˈbrʌptli]	compression	[kəmˈpreʃn]
apart	[əˈpa:t]	rigid	[ˈrɪdʒɪd]
expose	[ɪksˈpəʊz]	sequence	[ˈsiːkwəns]
extend	[ɪksˈtend]	tiny	[ˈtaɪni]

3. Read and translate the following words and word combinations.

**sequence** [ˈsɪkwəns] — the sequence of events, the sequence of tenses, in sequence;

**tiny** [ˈtaɪni] — tiny apical foramen, tiny hole, tiny piece;

**death** [deθ] — natural death, to meet one's death, worse then death, to cause death, to end in pulp death;  
**apart** [ə'pa:t] — apart from, to stand apart, to grow apart, joking apart.

III. Read the text, translate it and be ready to compose the plan of it.

## PULPITIS

Pulpitis occurs when caries extends through the dentine to reach the pulp. The pulp is then said to be EXPOSED and the sequence of events described under inflammation follows.

There is an increased blood flow through the apical foramen into the pulp. Swelling cannot occur, however, as the pulp is confined within the rigid walls of the root canal and pulp chamber. Pressure builds up instead and causes intense pain. A much more important result of this pressure, however, is compression of the blood vessels passing through the tiny apical foramen. This cuts off the blood supply and causes death of the pulp. When the pulp dies, its nerves die too, and the severe toothache stops abruptly. But the respite is short as pulp death leads to another very painful condition called alveolar abscess.

Pulpitis may be acute or chronic. It has many causes, apart from caries, but always ends in pulp death.

### Class Assignments

IV. Exercise 1. Find in the text English equivalents for the following words and word combinations.

1. сягати пульпи. 2. послідовність подій. 3. посилене надходження крові. 4. пульпова камера. 5. сильний біль. 6. здавлювання кровоносних судин. 7. дуже малий апікальний отвір. 8. кровопостачання кровоносних судин. 9. різко. 10. альвеолярний абсцес. 11. відмирання пульпи.

Exercise 2. Quote the sentences in which these words and word combinations are used in the text.

to be exposed, through the apical foramen, swelling, pressure, blood supply, severe toothache, acute, pulp death.



**Exercise 3.** *Match the following words logically.*

- a) blood flow, intense, pain, tiny, death, acute;
- b) chronic, little, die, severe, toothache, blood supply.

**Exercise 4.** *Answer these questions.*

1. When does pulpitis occur? 2. What sequence of events takes place? 3. Is there an increased blood flow? 4. Why cannot swelling occur? 5. What causes intense pain? 6. What is another result of the pressure? 7. What causes death of the pulp? 8. Why does the severe toothache stop abruptly? 9. What does pulp death lead to? 10. Is pulpitis acute or chronic? 11. Does it always end in pulp death?

**Exercise 5.** *Insert articles where necessary.*

## **ALVEOLAR ABSCESS**

When pulpitis occurs, ... pulp eventually dies as its blood supply is cut off by inflammatory pressure. ... dead pulp decomposes and infected material passes through ... apical foramen into ... periodontal membrane and alveolar bone at ... apex of the tooth. These irritant products give rise to another inflammatory reaction which soon develops into pus formation and ... acute alveolar abscess.

This is ... extremely painful condition. ... affected tooth becomes loose and very tender to the slightest pressure; there is ... continual throbbing pain and ... surrounding gum is red and swollen. Frequently ... whole side of the face is involved in inflammatory swelling and ... patient may have ... raised temperature. Looseness is due to swelling of ... periodontal membrane. Pain is due to increased pressure of blood within ... rigid confines of ... periodontal membrane and alveolar bone. ... tooth is so tender that it cannot be used for eating. Thus ... acute alveolar abscess may show all the classical features of acute inflammation: ... pain, ... swelling, ... redness, ... heat, ... loss of function and ... raised body temperature.

**Exercise 6.** *Insert the necessary prepositions.*

Pulp death is sometimes followed ... development of a chronic alveolar abscess instead. This usually gives rise ... very little pain and most patients are quite unaware ... its presence. It may often be detected ... the presence of a small hole ... the gum called a SINUS, which is a track leading from the abscess cavity in the alveolar bone to the surface ... the gum. Pus drains from the abscess through the sinus ... the mouth. This outlet prevents a build-up ... pressure inside the bone and explains the lack of pain.

If an acute abscess is not treated it eventually turns ... a chronic abscess by drainage of pus through a sinus. This relieves the pain and the features ... acute inflammation largely disappear. The relative freedom from pain does not last indefinitely, however, as a chronic alveolar abscess is always liable to turn ... an acute abscess ... any time.

It should now be clear that pulpitis is followed ... pulp death, and this leads eventually ... an acute alveolar abscess, either directly or via a chronic abscess.

**Exercise 7.** *Make up ten questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Translate into English.*

1. Пульпіт може бути гострий і хронічний. 2. Гострий пульпіт — початкова стадія запалення пульпи. 3. Від глибокого карієсу гострий пульпіт відрізняється різким болем, особливо у нічний час. 4. Компресія кровоносних судин пульпи утруднює кровоток і призводить до відмирання пульпи. 5. Разом з пульпою відмирають і нервові закінчення, біль ущухає. 6. Проте через 3-5 днів від початку запалення в пульпі формується абсцес. 7. Якщо гострий процес не лікувати, то він набуватиме хронічної форми. 8. Гострий абсцес має всі ознаки запалення: біль, припухлість, почервоніння, втрату функціонування та підвищення температури тіла.



**Exercise 10.** *Read the text and give the annotation of it.*

## **CARIES AND CIVILIZATION**

Caries is described as a disease of civilization. Amongst primitive uncivilized people, caries is virtually non-existent but wherever civilization spreads, caries inevitably follows. The explanation of this fact is the difference in diet between civilized and uncivilized communities.

«Civilized» food, consisting to a large extent of sticky refined carbohydrate with little raw fruit and vegetables, requires hardly any mastication. The reverse is true of a primitive diet; refined carbohydrate is unknown and plenty of raw natural foods are eaten, needing the maximum amount of mastication. As mentioned earlier, mastication in itself cleans the teeth; so these uncivilized peoples, with a diet devoid of refined carbohydrates and requiring considerable mastication, have no food debris capable of acid formation left on their teeth after meals. Furthermore the prolonged vigorous mastication necessary for this type of diet wears down cusps and eliminates fissures, thus removing the stagnation areas. This wear of the teeth which is known as **ATTRITION** cannot possibly occur to such an extent on our civilized diet of soft cooked food needing the bare minimum of chewing.

## **LESSON 17**

### **Home Assignments**

**I.** *Translate and learn the following words and word combinations.*

affect	[ə'fekt]	lodgement	[ˈlɒdʒmənt]
breakdown	[ˈbreɪkdaʊn]	resistant	[rɪ'zɪstənt]
consistency	[kən'sɪstənsi]	relief	[rɪ'li:f]
damage	[ˈdæmɪdʒ]	replacement	[rɪ'pleɪsmənt]
detergent	[dɪ'tɜ:dʒənt]	scour	[skauə]
ensure	[ɪn'sʊə]	source	[sɔ:s]
fill	[fɪl]	vital	[ˈvaɪtəl]
further	[ˈfɜ:ðə]	undertake	[ˌʌndə'teɪk]
incidence	[ˈɪnsɪdəns]		

## II. Read and translate the text «Prevention and Treatment of Caries».

### PREVENTION AND TREATMENT OF CARIES

Caries is a breakdown of tooth structure, caused by acid produced from carbohydrate food debris left on the teeth after meals. Therefore prevention of caries can be achieved by:

1. Removal of carbohydrate debris to prevent acid forming.
2. Prevention of acquired stagnation areas.
3. Making teeth more resistant to acid attack.

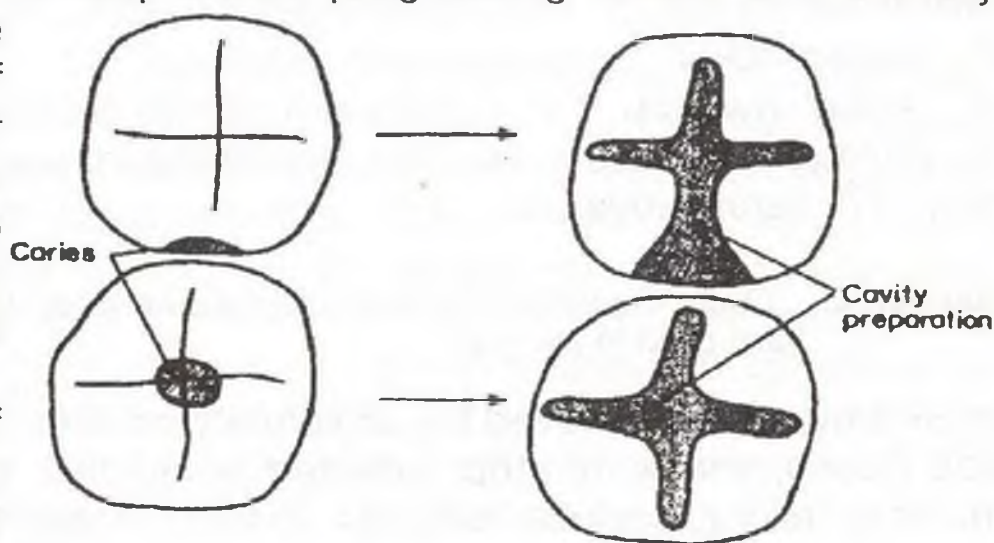
#### *Removal of Food Debris*

If all carbohydrate is cleaned off the teeth immediately after a meal, the source of acid formation is lost and caries will not occur. Unfortunately this cannot be done completely as no method of cleaning is absolutely perfect. However, it will ensure a considerable reduction in the incidence of caries.

Teeth may be cleaned with a toothbrush or detergent food. The latter is any raw, firm, fibrous fruit or vegetable such as an apple, pear, carrot or celery. Their hard fibrous consistency scours the teeth clean of food debris. The best way of personally preventing caries is to clean the teeth *immediately after every meal* by brushing or finishing with a detergent food, and *avoiding snacks between meals*.

If caries is allowed to progress untreated, it will cause toothache, followed by pulpitis and alveolar abscess. The object of treatment is to stop caries progressing further and thereby prevent or cure pain. Relief of pain and repair of damaged tissue will also restore function to decayed teeth.

The type of treatment given depends on the health of the pulp. If it is still



**Cavity preparation**



vital, and not affected by pulpitis, the tooth can be FILLED. But if the pulp is inflamed, or already dead, treatment is by EXTRACTION OR ROOT CANAL THERAPY. The choice depends on the value of the tooth to the patient. If it is desirable, and technically possible, conservative treatment is undertaken; otherwise it is extracted.

No drug can cure caries and nothing can make the lost tooth structure grow again. The best that can be achieved is the removal of all carious enamel and dentine and replacement by a filling. To prevent a recurrence of caries on the surface being filled, the cavity is extended to remove any other stagnation areas.

Thus a tooth with a small occlusal cavity has, not only the carious part, but all the occlusal fissures removed and filled.

The occlusal surface should then be immune from further caries as there are no stagnation areas left for lodgement of food. Similarly teeth with mesial or distal caries have the cavity preparation extended buccally and lingually to remove the entire stagnation area between the teeth.

### **Class Assignments**

**III. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. порушення структури зуба. 2. можна досягти. 3. з метою запобігання кислотним утворенням. 4. стійкий до дії кислоти. 5. відразу. 6. на жаль. 7. значне зменшення. 8. твердий волокнистий склад. 9. спричиняти зубний біль. 10. зняття болю. 11. відновлення пошкодженої тканини. 12. залежати від. 13. жива пульпа. 14. здійснити консервативне лікування. 15. вилікувати карієс. 16. видалення каріозних емалі та дентину. 17. запломбувати.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

caused by, to be achieved by, absolutely perfect, detergent food, food debris, snack, to stop, affected by pulpitis, to be undertaken, drug, filling, occlusal fissures, cavity preparation.

**Exercise 3.** *Insert articles where necessary and give a summary of the text.*

An obvious way of preventing caries would be ... abolition of refined carbohydrates from ... diet. Although this is not an acceptable proposition, at least ... compromise can be made by confining carbohydrate intake to mealtimes only, when ... teeth can be properly cleaned afterwards. Eating sweets, cakes and biscuits etc. between meals, when cleaning is not possible or convenient, is ... most important cause of caries and if this habit can be overcome there will be ... corresponding decrease in caries. ... tremendous amount of education of ... general public is urgently required to limit ... disastrous dental effects of eating refined carbohydrates during school breaks, in cinemas, watching television, and last thing at night after ... teeth have been cleaned.

**Exercise 4.** *Insert prepositions where necessary.*

### **ACQUIRED STAGNATION AREAS**

Acquired stagnation areas are those associated ... irregularly positioned or unopposed teeth, as these do not receive the normal self-cleansing effect ... mastication. Regular dental treatment plays a large part ... preventing this source ... caries, by providing orthodontic or prosthetic treatment to restore normal occlusion. Furthermore extractions can often be avoided ... early conservative treatment and thus prevent the need ... any future prosthetic treatment. Some partial dentures may permit food stagnation. They must be replaced ... new ones, correctly designed and well-fitting to prevent this.

**Exercise 5.** *Answer the questions on the text.*

1. How can you define caries? 2. By what measures can prevention of caries be achieved? 3. When is the source of acid formation lost? 4. What will ensure a considerable reduction of caries? 5. How can teeth be cleaned? 6. What is the best way of personally preventing caries? 7. Will untreated caries cause only toothache? 8. What is the object of treatment? 9. How does the health of the pulp influence the type of treatment? 10. When is conservative treatment undertaken? 11. What drug can cure caries? 12. What can make the lost tooth structure grow again? 13. Why is the cavity extended? 14. What do you know about the cavity preparation?



**Exercise 6.** *Give a summary of the text.*

**Exercise 7.** *Put questions to which the italicized words are the answers.*

1. Prevention of caries should include *the abolition of refined carbohydrates between meals*. 2. *If the pulp is still vital*, the tooth can be filled. 3. *To prevent a recurrence of caries on the surface being filled*, the cavity is extended. 4. *Extractions* can be avoided by early conservative treatment.

**Exercise 8.** *Translate into English.*

1. Запобігання карієсу можливе при дотриманні профілактичних заходів: видалення зубних відкладень, котрі сприяють порушенню кислотного балансу; належний догляд за ротовою порожниною, підвищення резистентності зубів до кислотного руйнування. 2. Якщо ви правильно чистите зуби, то можливість захворювання на карієс значно зменшується. 3. Якщо карієс не лікувати, то це може призвести не лише до зубного болю, але й до втрати зуба. 4. Зняття болю та відновлення пошкодженої тканини відновить і функціональні можливості зуба. 5. Вид лікування залежить від стану пульпи. 6. Ще немає таких ліків, котрі вилікували б карієс. 7. Щоб запломбувати порожнину, необхідно видалити пошкоджені емаль та дентин і замінити їх пломбувальним матеріалом.

**Exercise 9.** *Read the text «Acid Resistance». Translate it using a dictionary. Make the plan. Describe the ways of making teeth more resistant to caries.*

## ACID RESISTANCE

Teeth may be made more resistant to acid attack by ensuring a correct diet during pregnancy and childhood. This gives them a well-built structure free from any deficiencies. Good structure does not in itself make teeth immune to acid but it does make them more resistant than those which are less well formed. Enamel and dentine are composed mainly of *calcium* and *phosphorus*, and a diet containing adequate quantities of these, together with vitamins C and D, is essential during pregnancy and

childhood whilst the teeth are being formed. Meat, fish, eggs, dairy products, fresh fruit and vegetables provide these requirements.

Another factor which makes teeth more resistant to acid is **fluoride**. When present in the water supply it automatically forms part of the diet during the period of tooth formation. The result is a reduction of about fifty per cent in the number of carious teeth. In areas where fluoride occurs naturally in water, it is so effective that it is now being added artificially to other public water supplies. This is known as fluoridation. It still has the same beneficial effect and causes no harm whatsoever to general health. Where fluoride is deliberately added to the public water supply it is in a concentration of one part per million. This gives maximum caries resistance and has no harmful effect on the teeth or rest of the body. Some areas however, have fluoride occurring naturally in much higher concentrations. Whilst this is still caries resistant and without harm to the rest of the body, it does have one great drawback: an unsightly mottling of the teeth. When added artificially though, at a concentration of one part per million, mottling does not occur.

Another way of making teeth more resistant to caries is to apply flouride directly to the crowns of teeth. This is known as topical fluoridation but although it does reduce the incidence of caries, it is not as effective as fluoridation of water supplies. It is done by polishing the teeth and then rubbing a fluoride solution over them. **Stannous** or **sodium fluoride** is usually used and should be applied at least once a year. However, it is a time-consuming procedure and has not been universally adopted because of the shortage of dental operators. Fluoridated toothpaste is also of value as it produces a greater reduction in decay than ordinary toothpaste.

## LESSON 18

### I. Remember:

Суфікси **-ant**, **-ent** належать прикметникам: permanent — постійний; significant — важливий, суттєвий.

1) Read and translate:

appropriate, present, absent, important, adherent.



За допомогою суфікса **-ness** утворюються іменники від прикметників: red — червоний; redness — почервоніння.

2) Read and translate:

coldness, readiness, weakness, whiteness.

3) Read, analyze and translate the following words.

necessary — unnecessary; pain — painless; use — useless; possible — impossible; mobile — immobile; normal — abnormal; helpful — unhelpful.

II. Translate and learn the following words.

appearance	[əˈpiərəns]	lining	[ˈlainɪŋ]
bur	[bɜː]	margin	[ˈmɑːdʒɪn]
chip	[tʃɪp]	match	[mætʃ]
eradicate	[ɪˈrædikeɪt]	require	[rɪˈkwaɪə]
handpiece	[ˈhændpiːs]	restore	[rɪˈstɔː]
insert	[ɪnˈsɜːt]	retention	[rɪˈtenʃn]
inlay	[ɪnˈleɪ]	undermine	[ʌndəˈmaɪn]
irritant	[ˈɪrɪtənt]		

III. Read the text «Filling» and translate it.

## FILLING

Conservative treatment of caries, when the pulp is vital and unexposed, is by filling. If the pulp is exposed or dead, root canal therapy is usually necessary before the filling is done. Fillings are inserted in teeth to replace the part destroyed by caries. The normal function of the tooth is thereby restored, pain is prevented, and the vitality of the pulp is preserved. In front teeth, fillings restore normal appearance; *whilst*<sup>1</sup> in back teeth, the stagnation areas are eradicated and further caries prevented. Temporary fillings are inserted as a temporary measure only. They are too soft to use as permanent fillings. The temporary fillings are:

Zinc oxide and eugenol cement,

Zinc phosphate cement,

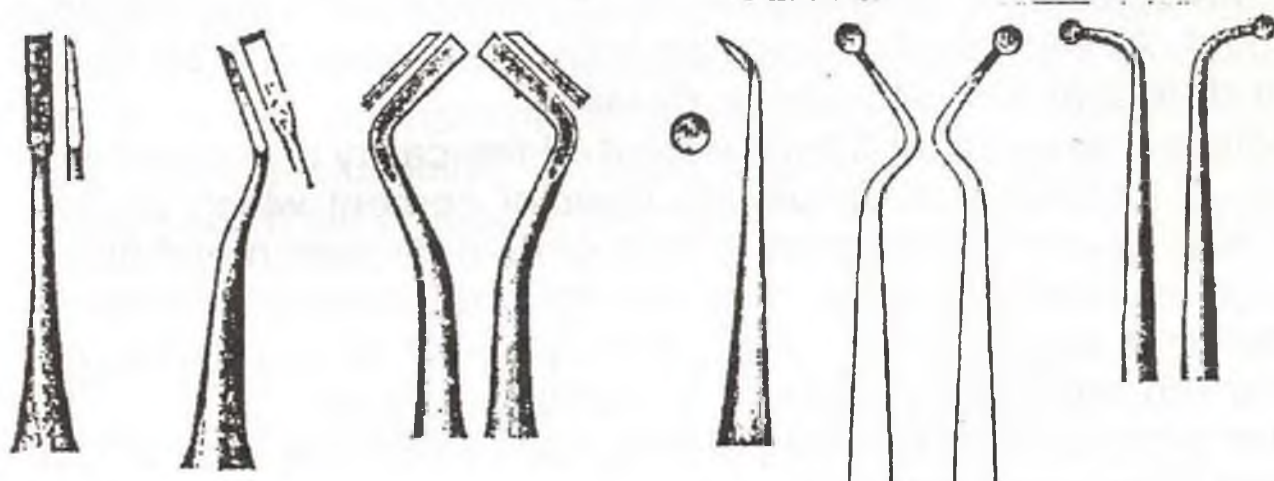
Zinc polyacrylate cement,

*Gutta-percha*.<sup>2</sup>

Permanent fillings are also various.

For premolars and molars, amalgam or gold is used. In front teeth, where these fillings would show, SILICATE CEMENT, ACRYLIC or COMPOSITE fillings are used instead as their colour matches the tooth. A permanent filling cannot be inserted directly into a carious cavity. Careful preparation of the cavity is required to ensure that all caries is removed; that the filling will be a permanent fixture; and caries will not recur at its margins. The general principles of cavity preparation are as follows:

1. Undermined enamel is chipped away with an enamel chisel.
2. The cavity is extended to remove the entire stagnation area,



**Chisels and excavators. Left: Chisels. Right: Excavators.**

e.g. occlusal fissures, on the carious surface. This is done with a HANDPIECES and BURS.

3. Any remaining caries is removed with an EXCAVATOR.
4. Burs and chisels are then used to finish off the cavity according to the type of filling necessary.

Permanent fillings are meant to stay put permanently and the cavity must be specially prepared to provide maximum retention. Before explaining how this is done, it is necessary to consider the types of fillings used. There are only two types available: plastic and *pre-constructed*<sup>3</sup>.

PLASTIC FILLINGS are soft and plastic on insertion but set hard in the cavity. They include temporary cements, gutta-percha, amalgam, silicate cement, acrylic and composite fillings.



Pre-constructed restorations are INLAYS and CROWNS. These are made in the laboratory, after the teeth have been prepared, and are then cemented into place.

Retention for plastic fillings is obtained by simply UNDERCUTTING the cavity to make the entrance smaller than its inside dimensions.

Thus a plastic filling can be packed in when soft but cannot possibly come out when hard. For fillings involving occlusal and mesial surfaces, or occlusal and distal, a DOVETAIL is cut in the occlusal surface to prevent the filling coming out mesially or distally. Gold inlays and crowns are hard and rigid when inserted and cannot utilize undercuts for retention. To prevent them coming out occlusally, they rely on parallel cavity walls and adhesive cement. As with plastic fillings an occlusal dovetail is used to prevent dislodgement mesially or distally.

Before a permanent filling is inserted the cavity may need to be lined. A LINING is an insulating layer of cement which protects the pulp against conduction of heat or cold through metal fillings; or against the irritant effect of certain other fillings, such as silicates and acrylic. Pain, and possibly death of the tooth, may occur through failure to insert an adequate lining.

The technique of inserting a filling varies with the type of cavity and filling material used.

## Notes

<sup>1</sup> **whilst** — у той час, як (= while)

<sup>2</sup> **gutta-percha** — гутаперча

<sup>3</sup> **pre-constructed** — заздалегідь виготовлена

## Class Assignments

IV. Exercise 1. Find in the text English equivalents for the words and word combinations.

1. вносити до зубів.
2. відновити природний вигляд.
3. тимчасова пломба.
4. надто м'які.
5. постійна пломба.
6. препарування.
7. край.
8. відповідно до типу пломбування.
9. максимальна ретенція.
10. затвердівати в порожнині.
11. прокладка.
12. захищати пульпу.
13. подразнювальна дія.
14. невдача.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

root canal therapy, to be preserved, temporary measure, to match, a permanent fixture, excavator, to provide, plastic fillings, pre-constructed restorations, undercutting, adhesive cement, adequate lining.

**Exercise 3.** *Answer these questions.*

1. When are fillings inserted in teeth? 2. What do fillings restore? 3. Why are temporary fillings not used as permanent? 4. Why is careful preparation of the cavity required? 5. What are the general principles of cavity preparation? 6. How must the cavity be specially prepared for permanent fillings? 7. What plastic fillings do you know? 8. Where are pre-constructed restorations made? 9. How is retention for plastic filling obtained? 10. Where do permanent fillings rely in order to prevent them coming out occlusally? 11. What is a lining? 12. Is a lining necessary? 13. What does a technique of inserting a filling vary with?

**Exercise 4.** *Match the following words logically.*

- a) vital, destroy, front, soft, entrance, pack in, heat.
- b) back, cold, come out, hard, dead, preserve, exit.

**Exercise 5.** *Insert articles where necessary.*

Before caries is treated, it must first be detected. Large cavities are obvious to ... naked eye but it is easier to treat caries before cavities reach such ... size. Small occlusal cavities are found with a sharp needle-pointed instrument called a PROBE. Mesial and distal cavities can be found with ... special double-ended probe called a BRIAULT PROBE.

By ... time mesial or distal cavities are found with a Briault probe, caries is already far advanced. Detection at ... earlier stage is achieved by taking X-ray films. ... special film called a BITE-WING shows caries before it can be seen by any other method.

Another way of finding mesial and distal cavities at ... early stage is TRANSILLUMINATION. A bright light is placed against ... crown and ... cavity shows up as a dark shadow. This method is



not as good as bite-wing X-rays but is quite useful on ... front teeth.

**Exercise 6.** *Insert prepositions or adverbs.*

The cavity must be dry ... insertion. Almost all fillings cannot adhere ... wet cavities. There are different methods ... drying cavities. One of them is suction. The patient holds a SALIVA EJECTOR attached ... the unit or ASPIRATOR. Many different types are used but those with a flange to keep the tongue ... are particularly helpful. The nurse assists ... holding a wide bore aspirator tube or using a retractor to keep the tongue or cheek ... . Cotton wool rolls are also used. These are placed ... the buccal or lingual sulcus to absorb saliva and keep the soft tissues away from the teeth. Napkins may also be used ... the same purpose. The cavity itself is dried ... cotton wool, followed ... a short blast from the warm air syringe on the unit.

**Exercise 7.** *Put 10 questions on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Translate into English.*

1. Консервативне лікування полягає у видаленні пошкоджених емалі та дентину і реставруванні зуба. 2. За допомогою пломбування відновлюється нормальне функціонування зуба, усувається біль та поліпшується його зовнішній вигляд. 3. Тимчасова пломба є тимчасовим заходом. 4. Постійна пломба потребує спеціального препарування порожнини залежно від виду пломбувального матеріалу. 5. Пластмасові пломби до порожнини вносять у м'якому стані, де вони потім затвердівають.

**Exercise 10.** *Read the text «Control of Saliva» and say what you have learn about rubber dam.*

## **CONTROL OF SALIVA**

Fillings inserted in wet cavities are always unsatisfactory. No matter what material is used the cavity must be perfectly dry dur-

ing insertion. Linings and cements cannot adhere to wet cavities; whilst silicate and amalgam are ruined by saliva contamination.

Different methods are used to control saliva.

Rubber Dam is the best method of all. Rubber dam is a thin sheet of rubber which is placed over a tooth to isolate it from the rest of the mouth. A RUBBER DAM PUNCH is used to punch a small hole in the rubber, which is then fitted on so that the tooth projects through the hole. The rubber dam is kept in place by a RUBBER DAM CLAMP which is fixed on the tooth with RUBBER DAM CLAMP FORCEPS. Finally a RUBBER DAM FRAME is used to support the sheet of rubber. A napkin is placed between the patient's chin and the rubber to make it more comfortable; and a saliva ejector is provided. FLOSS SILK is used to work the rubber between the teeth.

Rubber dam may be applied to any number of teeth. It enables the operator to keep the tooth dry and sterile, and prevents bits of filling material, debris or small instruments falling into the patient's mouth. Ideally it should be used for all fillings.

The two main uses of rubber dam are: to maintain a sterile field in root canal therapy; and during insertion of silicate cement to avoid weakness and porosity caused by saliva contamination. Rubber dam clamps are often used alone to hold cotton wool rolls in place, especially when filling lower molars.

## LESSON 19

### Home Assignments

#### I. *Remember:*

Префікс **inter-** [intər] перекладається **між-, серед-, взаємо-:** interaction [ˌintərˈækʃn] — взаємодія.

1) *Read and translate.*

interspace, interproximal, international, intermediate, interdependent.

Префікс **sub-** відповідає в українській мові префіксу **під-** : acute — гострий; subacute — підгострий



2) Read and translate.

subdivide, subconscious, subclass, substandard, subordinate.

II. Translate the words and learn them.

adhesive	[əd'hi:siv]	insulate	[ ' insjuleit]
alloy	[ ' æloi]	manipulate	[mə' nipjuleit]
band	[bənd]	mix	[miks]
bind	[baɪnd]	prefer	[pri: ' fə:]
capsule	[ ' kæpsju:l]	resin	[rezin]
decompose	[.di:kəm' pouz]	safe	[seif]
first-aid	[eid]	stain	[stein]
harden	[hɑ:dn]	shrinkage	[ ' ʃrɪŋkidʒ]
intact	[in' tækt]	withstand	[wið ' stænd]

III. Read and translate the text «Fillings». Compose the plan of the text.

### FILLINGS

The temporary filling materials most commonly used are zinc oxide and eugenol cement, zinc phosphate cement, zinc polyacrylate cement and gutta-percha. They are not used as permanent fillings as they are too soft and would not remain intact for long periods.

*Temporary Fillings are used:*

1. As a first-aid measure to relieve pain.
2. When there is insufficient time to complete the cavity and insert a permanent filling in one visit.
3. For permanent fillings requiring more than one visit, e.g. inlays and crowns, a temporary restoration is necessary between visits.

Zinc oxide and eugenol cement is non-irritant to the pulp and can be safely used in the very deepest cavities.

It is too soft and slow-setting to use as a foundation for a permanent filling in one visit. But this can be overcome by using a quick-setting proprietary brand which hardens rapidly enough to make a satisfactory lining for permanent fillings. It cannot be used as a lining for acrylic fillings.

Preparations containing eugenol may cause a burning sensation if they come in contact with the lips. Amalgam is the most

widely used permanent filling in dentistry and is prepared by mixing the ALLOY with MERCURY. The alloy contains silver, tin, copper and zinc; well over half consists of silver, whilst tin forms just over a quarter. *It is supplied*<sup>1</sup> in the form of powder for hand mixing, or as pre-packed capsules or *pellets*<sup>2</sup> for mechanical mixing.

As amalgam is a plastic filling and a good conductor, cavities are undercut for retention and lined to insulate the pulp.

The colour precludes its use in front teeth *where it would show*<sup>3</sup>. As it is a good conductor, a lining is necessary in all but the shallowest cavities to prevent pain from sudden temperature changes, such as occur with very hot or cold drinks.

Acrylic is used as a permanent filling for front teeth as it matches them perfectly and equals silicate in this respect. However, it has many other important uses in dentistry. Both silicate cement and acrylic have serious shortcomings as permanent filling materials for front teeth. Silicate fillings are really only *semi-permanent*<sup>4</sup> and, unless a *meticulous*<sup>5</sup> technique is used, may discolour and lose their perfect appearance. Similarly, acrylic fillings may undergo marginal staining due to shrinkage. In an attempt to overcome disadvantages, new filling materials have recently been introduced which combine the best properties of both materials and avoid their worst defects. These new materials are known as composite fillings and several types are available.

Basically they consist of an inorganic *strengtheners*<sup>6</sup> in a resin binder. The inorganic strengthener may resemble silicate cement or consist of glass beads or quartz. This is incorporated into the resin binder.

## Notes

<sup>1</sup> ***to be supplied*** — випускатися

<sup>2</sup> ***pellet*** — гранула

<sup>3</sup> ***where it would show*** — де вона (пломба) буде помітною

<sup>4</sup> ***semi-permanent*** — не цілком постійні

<sup>5</sup> ***meticulous*** — ретельний (= careful)

<sup>6</sup> ***strengtheners*** — ініціатор полімеризації



## Class Assignments

**IV. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. найуживаніші. 2. надто м'який. 3. подолати. 4. досить швидко. 5. уникнути. 6. містити. 7. у вигляді порошку. 8. щодо цього. 9. втратити гарний зовнішній вигляд. 10. недостатнє крайове прилягання. 11. є кілька видів.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

remain intact, insert a permanent filling, to harden rapidly, the most widely used, hand mixing, to insulate the pulp, the shallowest cavities, to match perfectly, shrinkage, to be available.

**Exercise 3.** *Answer these questions.*

1. What temporary filling materials do you know? 2. Why aren't they used as permanent filling? 3. When are temporary fillings used? 4. Can zinc oxide and eugenol cement be used as a foundation for a permanent filling? 5. What is amalgam? 6. In what form is it supplied? 7. Why are cavities undercut for retention with amalgam? 8. Why can't it be used in front teeth? 9. What disadvantages have silicate cement and acrylic? 10. What new materials have been recently introduced? 11. What do they consist of?

**Exercise 4.** *Compose sentences, using the following words.*

Uses of Temporary Fillings.

Relief of pain.

Inability to complete permanent fillings in one visit.

Between visits for inlays or crowns.

Amalgam Alloy.

Contains silver, copper, zinc.

Mixed with mercury in proportion of 5:8 by weight.

Composite Fillings.

Strongest permanent filling for front teeth.

Expensive.

**Exercise 5.** *Insert articles where necessary.*

## **GOLD INLAYS**

Gold is used in ... form of cast inlays and crowns for permanent restoration of back teeth. The cavity is prepared and ... WAX PATTERN of the inlay is made. In ... laboratory a gold casting is made from ... wax pattern. The cast gold inlay is then cemented into ... cavity with ... thin mix of zinc phosphate cement. Thus a minimum of two visits is required for ... gold inlay: ... first to prepare the cavity for a wax pattern; ... second to cement the cast gold inlay. ... gutta-percha temporary filling is convenient between visits as it can be removed in one piece without drilling. The cavity preparation is made retentive but of such ... shape that ... wax pattern can be withdrawn without distortion. Tapered fissure burs are used as they are less likely to produce ... undercuts. Any undercuts within ... cavity are blocked out with the lining cement before ... wax pattern is taken. ... wax pattern can be made directly in the mouth or indirectly in the laboratory.

**Exercise 6.** *Insert the prepositions.*

## **CROWNS**

A crown is an artificial restoration which replaces at least three-quarters ... the natural crown ... the tooth. There are various types, made of various materials. Like inlays they require at least two visits: one ... the preparation and impression; the other ... cementing into place.

... the first visit the tooth is prepared, using diamond discs and wheels, tapered fissure and end-cutting burs. The indirect method is always used ... crowns as it is too difficult and time consuming to take a direct wax pattern. After the impression a wax squash bite is taken and, ... front teeth, the shade is recorded. A temporary crown is then cemented and the patient is dismissed. Temporary crowns ... front teeth are usually made ... acrylic or silicate in a plastic CROWN FORM. ... back teeth a metal crown form is often used.



**Exercise 7.** *Make up 10 questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Translate into English.*

1. Тимчасові пломби ставлять у тому разі, коли необхідно зняти біль чи обмаль часу для встановлення постійної пломби за одне відвідування. 2. Під постійні пломби часто виникає потреба робити прокладки. 3. Амальгама найчастіше використовується для пломбування бокових зубів. 4. Акрилова пластмаса використовується як пломбувальний матеріал на передніх зубах. 5. Проте вона має недоліки: не досить прилягає по краю та змінює колір. 6. Останнім часом з'явився новий пломбувальний матеріал — композит, котрий чудово підходить для пломбування передніх та бокових великих порожнин зубів. 7. Композити набагато твердіші за акрилові пластмаси. 8. Працювати з ними простіше, а результати значно кращі.

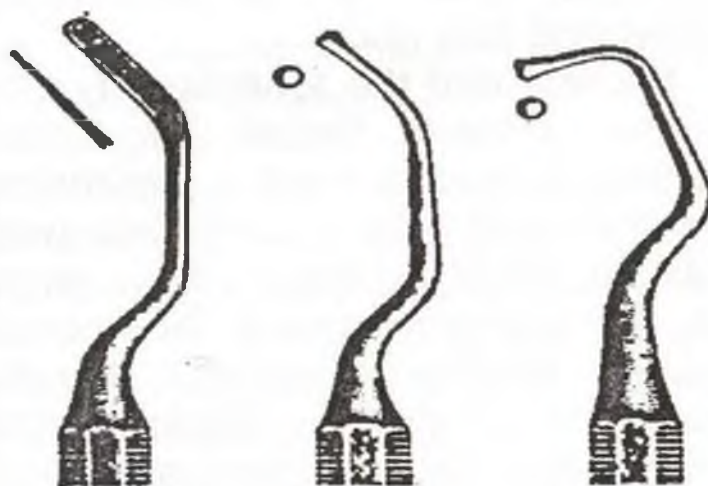
**Exercise 10.** *Read and translate the text. Look up the words you do not know in the dictionary. Try to remember the names of the instruments.*

While examining and treating a patient the dentist needs a set of instruments for fillings.

## INSTRUMENTS

For each patient the instruments required are:

1. Mirror, probe, tweezers, napkins, waste receiver.
2. Aspirator, saliva ejector, cotton wool rolls and cotton wool for keeping the cavity dry.
3. Enamel chisels for removing undermined enamel and smoothing the cavity margins.
5. Handpiece and burs for



***Plastic instruments.***

drilling away hard tissue.

6. PLASTIC INSTRUMENTS. These double-ended blunt instruments have flatter round ends for manipulating, packing and trimming the filling or lining.

7. Special instruments and drugs. Some fillings require the use of certain instruments or drugs which are not used for other fillings. These special requirements are dealt with under the appropriate filling materials.

**Exercise 11.** *Speak about the filling materials for permanent fillings using the table.*

FILLING	USES	ADVANTAGES	DISADVANTAGES
Amalgam for Lining usually	Permanent filling for back teeth	1. Simple technique 2. Rapid set required 3. Strength	Lining usually required
Gold inlay	Permanent filling for back teeth	Much stronger than amalgam	Involves far more time and expense than amalgam or any other filling
Silicate cement	Permanent filling for front teeth	Simple technique	1. Highly irritant — lining essential 2. Ruined by saliva — rubber dam essential
Acrylic	Permanent filling for front teeth	1. Simple technique 2. Additions and complicated restorations possible	Ruined by eugenol — zinc phosphate lining used when necessary
Composite	Permanent filling for front teeth	1. Simple technique 2. Strongest and most permanent front filling 3. Suitable for large and complicated restorations	1. Polishing difficult 2. Expensive



## LESSON 20

### Conversations. A. AT THE DENTIST'S. B. YOU NEGLECT YOUR TEETH. C. AT A PRIVATE DENTAL SURGERY.

#### Home Assignments

##### I. *Learn these speech patterns.*

You'd better have it X-rayed — Краще б вам зробити рентгенівський знімок.

##### 1) *Make up sentences using the table and translate them.*

You'd better have	your tooth X-rayed. this tooth cut out. your mouth examined regularly.
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##### 2) *Translate into English.*

Краще б вам	вилікувати цей зуб зараз. зробити аплікацію на ясна. видалити цей зуб.
-------------	--

You should have come for a checkup long ago. — Ви мали давно прийти на огляд.

##### 3) *Make up sentences using the table and translate them.*

You should have	done it beforehand. taken care of your dental health. been more careful in your eating habits. used a fluoridated toothpaste.
-----------------	--

##### 4) *Make up six sentences using patterns 1 and 2.*

##### II. 1. *Translate these words and word combinations and learn them.*

afford

[ə'fɔ:d]

hurt

[hɜ:t]

to be far gone	[gɒn]	look like	
break	[breɪk]	pleasure	[ˈpleɪʒə]
checkup	[tʃek]	spit out	[spɪt]
drop out	[drɒp]	trouble	[trʌbl]
gargle	[gɑːgl]		

2. Read and translate the following words and word combinations.

**hurt** [hɜːt] — to hurt badly, to hurt a little, to feel hurt, hurtful.

**break** [breɪk] — broke, broken, to break one's tooth, without a break, the abscess broke.

**afford** [əˈfɔːd] — to afford an expensive filling, to afford a holiday, can afford it.

III. Read and translate the dialogues.

### A. AT THE DENTIST'S

Dentist: Sit down, please. What do you complain of?

Patient: I have a very bad toothache. I can't eat and I can't sleep at night.

- Open your mouth, please. Which tooth troubles you?
- It's a big tooth at the back on the left. Ugh... that hurts very badly.
- Yes, that tooth has a big cavity, but *I think I can stop it for you*<sup>1</sup>. The tooth isn't far gone. Why didn't you come earlier?
- Well, you know, it is not quite a pleasure to go to the dentist's. And every time I decided to come it got better.
- When did the ache appear?
- The ache appeared last week.
- Do you feel this ache from cold or hot water?
- I feel the ache from cold water.
- Open your mouth wider. I shall put a temporary filling in this tooth. Spit out, please. I think everything will be all right. Come to me tomorrow.
- Thank you doctor. Good bye.



## B. YOU NEGLECT YOUR TEETH

Dentist: What's the trouble, Mr.Green?

Patient: I have a filling *which is loose*<sup>2</sup> and I also have an awful pain in my lower tooth on the right.

- Let's have a look at the filling. Open your mouth wider. That's it. Yes, it's about to drop out. Now let's see the bad tooth. Is it sensitive to heat and cold?
- Yes, very. I haven't had anything hot to eat or drink for the last five days.
- That's too bad. You should have come for a checkup long ago. I think it's been hurting you *for quite a while*<sup>3</sup>. We'd better have it X-rayed. I shall start with the filling and then we'll see what to do with your other teeth. Gargle your mouth, please. Don't worry. I'll give you an injection.
- That's all right, Doctor.

## C. AT A PRIVATE DENTAL SURGERY

Dentist: What's the matter, Mary?

Patient: I have broken my tooth. It's a lower tooth on the left.

- Let me have look at it. Open your mouth wide. Does this tooth hurt?
- Yes. I am afraid that it aches a little.
- Yes, it is. We must have it X-rayed. (In some minutes). I think I can give you a composite filling. It's strong and suitable for large restorations. But it is rather expensive.Can you afford it?
- Yes, I think so. Besides it is more aesthetic and will look like a natural tooth.
- Let's start then. It'll take some time but soon you'll forget about your fear and the tooth will be better *than it used to be*<sup>4</sup>.

### Notes

<sup>1</sup> *I think I can stop it for you* — Я вважаю, що можу його вилікувати.

<sup>2</sup> *which is loose* — котра стала непридатною.

<sup>3</sup> *for quite a while* — досить тривалий час.

**4** *than it used to be* — ніж був раніше.

## Class Assignments

**IV. Exercise 1.** *Find in the dialogues English equivalents for these words and word combinations.*

1. на що скаржитесь? 2. сильний зубний біль. 3. який зуб непокоїть? 4. дуже боліти. 5. зуб не дуже занедбаний. 6. стає краще. 7. сплюнути. 8. випасти (про пломбу). 9. огляд. 10. зробити укол. 11. прополоскати рот. 12. зламати зуб. 13. бути придатним для великих реставрацій. 14. це потребує певного часу.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

at night, at the back, earlier, appear, an awful pain, sensitive, X-ray, worry, hurt, expensive, aesthetic, forget.

**Exercise 3.** *Fill in the blanks with missing remarks. Reproduce the dialogues.*

1. — Sit down, please. What do you complain of?

— ...

— Open your mouth, please. Which tooth troubles you?

— ...

— Yes, this tooth has a big cavity, but I think I can stop it.

2. — Why didn't you come earlier?

— ...

— When did the ache appear?

— ...

— Do you feel the ache from cold or hot water?

— ...

3. — Open your mouth wider. That's it. Is it sensitive to heat and cold?

— ...

— That's too bad. You should have come for a checkup long ago. You'd better have it X-rayed. Come tomorrow.



4. — What's the matter?  
 — ...  
 — Let me have look at it. Open your mouth wider. Does this tooth hurt?  
 — ...  
 — It must be X-rayed. If the pulp is vital I can give you a composite filling.
5. — I think I can restore this broken incisor with a composite. It's strong and suitable for such restorations. But it's rather expensive. Can you afford it?  
 — ...  
 — Let's start then. It'll take us some time, but the tooth will be better than it used to be.

**Exercise 4.** *Think of the questions and statements to which the following sentences are the answers.*

1. — ...?  
 — I have an awful toothache. I can't sleep and eat.
2. — ...?  
 — It's not quite a pleasure to come to the dentist's.
3. — ...?  
 — The ache appeared last week.  
 — ...  
 — I feel the ache from cold.
4. — ...?  
 — I have a filling which is loose.
5. — ...  
 — Yes, very. I haven't had anything hot to eat or drink for the last five days.
6. — ...?  
 — I have broken my tooth. It's a lower tooth on the left.  
 — ...  
 — Yes, it aches a little.

**Exercise 5.** *Remember the questions of the dentist and find answers in the right column.*

- |                             |   |
|-----------------------------|---|
| 1. What do you complain of? | It's a big tooth at the back on the left. |
|-----------------------------|---|

- |  |   |
|--|---|
| 2. Which tooth troubles you?               | I have a bad toothache.                     |
| 3. Why didn't you come earlier?            | The ache appeared last week.                |
| 4. When did the ache appear?               | I feel this ache from cold.                 |
| 5. Do you feel this ache from cold or hot? | It's not a pleasure to go to the dentist's. |
| 6. Does this tooth hurt?                   | I am afraid it aches a little.              |

**Exercise 6.** *Act as interpreter:*

1. — Будь ласка, сідайте. Як ваше прізвище?  
 — My name is Nick Green.  
 — На що скаржитесьь?  
 — I have a bad toothache.  
 — Давайте оглянемо. Який зуб Вас непокоїть ?  
 — It's a lower tooth on the left.  
 — Так, зуб зруйнований, є невелика порожнина. Чи реагує зуб на гаряче або холодне?  
 — Yes, I can't drink cold.  
 — Коли з'явився біль?  
 — Yesterday.  
 — Що ж, давайте лікувати цей зуб.
  
2. — Tell me, please, why didn't you come earlier for a check up. You have some bad teeth.  
 — Розумієте, лікарю, не дуже приємно ходити до стоматолога.  
 — Don't be afraid. I'll give you an injection. It won't hurt. You won't feel any pain.  
 — Дякую, лікарю.
  
3. — Відкрийте широко рот. Цей зуб болить?  
 — Yes, it hurts badly.  
 — Так, у зубові наявна велика порожнина, але я вважаю, що його можна вилікувати. Зуб не дуже зруйнований.  
 — Will the filling be seen?  
 — Ні, я зроблю пломбу з композиту. Він цілком придатний для реставрації передніх зубів. Після реставрації зуб матиме природний вигляд.



**Exercise 7.** *Translate into English.*

1. — Добрий день. Сідайте, будь ласка. На що скаржитесь?  
— У мене дуже болить зуб.  
— Відкрийте, будь ласка, рот. Який зуб Вас непокоїть?  
— Збоку справа. Ой, тут дуже боляче.  
— Так, зуб зруйнований. Ми сьогодні почнемо його лікувати.
2. — Відкрийте ширше рот, будь ласка. Тут боляче?  
— Так, дуже.  
— Коли з'явився біль?  
— Два дні тому.  
— Чому ж Ви не прийшли раніше?  
— Кожного разу, коли я збирався, мені ставало краще.
3. — Коли з'явився біль?  
— На тому тижні.  
— Чи відчуваєте Ви біль від гарячого або холодного?  
— Від холодного.  
— Вам варто зробити рентгенівський знімок. Я поставлю тимчасову пломбу. А ви прийдете із знімком завтра.  
— Дякую, лікарю.
4. — Відкрийте ширше рот, будь ласка. У Вас одна пломба випала. Ми її замінимо. Прополощіть рот, сплюньте.  
— Лікарю, буде боляче?  
— Ні, я зроблю укол з анестетиком. Не бійтеся, не буде боляче. Я поставлю Вам пломбу з композиту. Він має чудовий естетичний вигляд на різцях. До того ж саме цей матеріал придатний для таких реставрацій. Правда, це дорогий матеріал.  
— Нічого, лікарю. Краще хай буде дорожче коштувати, зате матиму гарні зуби.

**Exercise 8.** *Make up dialogues based on these situations.*

**1. YOU HAVE A TOOTHACHE AND COME TO THE DENTIST'S. 2. YOU HAVE BROKEN YOUR TOOTH AND WANT TO HAVE IT RESTORED. 3. YOU HAVE COME TO THE DENTIST'S FOR A CHECKUP.**

## **LESSON 21**

### **REVISION**

#### **Class Assignments**

1. *Read the text and translate it in a written form, using a dictionary.*

### **HANDPIECES AND BURS**

Cavities are cut with burs fitted in a handpiece. Speed of cutting depends on the type of handpiece used.

Conventional handpieces run at slow speed — up to 4,000 revolutions a minute. They are usually driven by a cord running from the electric motor on a unit. Alternatively they are driven by a miniature motor at the base of the handpiece. A CONTRA-ANGLE handpiece is used most often as it provides access to every tooth. For easily accessible teeth, and trimming dentures, a STRAIGHT handpiece is used.

Air turbine handpieces run at very high speeds — up to 400,000 revolutions a minute. There is a tiny air turbine motor in the head of the handpiece which is driven by compressed air. They are contraangled and are used with a built-in water spray to counteract the heat generated by high-speed cutting. The advantages of air turbine handpieces are the ease and speed of cutting, and absence of vibration. Disadvantages are the difficulties caused by water spray, and the high pitched whistling noise.

Burs used in conventional low speed handpieces are made of steel. For air turbine handpieces they are made of TUNGSTEN CARBIDE or DIAMOND. Straight handpiece burs have a long plain shank. Burs for conventional contra-angle handpieces are short and have a notch in the shank which fits by a latch grip.



Short burs are also used for the air turbine handpieces but they have a plain shank which gives A FRICTION GRIP.

Contra-angled conventional handpieces with smaller heads, and using even shorter burs, are used on children. They are called MINIATURE handpieces and burs. The cutting ends of burs are made in many different shapes but those most commonly used are as follows:

1. Round — used for gaining access to cavities and removing caries.
2. Cone — used for undercutting cavities.
3. Fissure — used for extending cavity to remove stagnation areas.

II. *Form and translate the new words using given suffixes.*

**-ence, -ance:** occur, exist, depend, enter, appear;

**-ment:** develop, establish, require, impair;

**-able:** vary, value, favour;

**-sion:** diffuse, invade, decide, divide, conclude.

III. *Read the words, state the prefixes in them, translate the words:*

interspace, subdivide, interproximal, interaction, subacute, subordinate.

IV. *State the suffixes in these words, translate them.*

efficiency, division, inhibition, tiredness, significance, difference, various, specific, primary, effective, dilate, communicate, extensible.

V. *Read the text and give the annotation of it.*

Everyday, a layer of sticky bacterial plaque forms constantly on the surfaces of teeth. In those areas where it is difficult to remove, such as between the teeth and along the gum line, plaque can accumulate and cause disease.

Decay is caused by certain plaque bacteria which produce acids from sugary foods and drinks. These acids attack the tooth, gradually dissolving the enamel. If subjected to frequent acid attacks, the

surface of the tooth eventually breaks down and a cavity appears. This usually requires a filling to restore the lost structure.

Plaque bacteria can also cause the gums to become inflamed and swollen, leading to a condition known as gingivitis and possibly to a more serious condition called periodontitis. In its advanced stage, teeth may become loose and have to be removed. Bleeding gums are often an early sign of gum disease.

Halitosis can often be caused by a build-up of plaque, therefore, its removal is important for fresh breath as well as healthy teeth and gums.

VII. *Make up dialogues based on these situations.*

1. AT THE DENTIST'S. 2. AT A PRIVATE DENTAL SURGERY.

## Unit II. ENDODONTICS. PERIODONTAL DISEASE FIRST STEPS IN ORAL SURGERY

### LESSON 22

Словотворення: префікси **dis-, a-, ab-, be-, com-, con-, pre-, de-, ex-, per-**.

суфікси: **-ian, -ize (-ise)**.

Граматика: Складний додаток. Абсолютна називна конструкція.

### Home Assignments

I. *Compare these two sentences and answer the questions.*

A. a) I know that he studies well. b) I know him to study well.

1. Яким підрядним реченням виступає **that he studies** у реченні (а)? 2. Чи є сполучник **that** у реченні (б)? 3. У якому відмінку займенник **he** у реченні (б)? 4. Якого стану набуло дієслово **studies** у реченні (б)? 5. Чому відповідає **that he studies** у реченні (б)? 6. Якщо **him to study = that he studies**, то як маємо перекласти **him to study** у реченні (б)? 7. На яке питання відповідає **that he studies**? 8. Отже, на яке питання відповідає словосполучення **him to study**? 9. Який член речення відповідає на питання **що (кого)**? 10. Отже, яким



членом речення виступає словосполучення **him to study?** (Див. граматичний довідник, стор. 506-507).

1) *Find the complex object:*

1. I expected this tooth to be filled with a composite filling material. 2. The dentist wanted the patient to follow his instructions. 3. I consider this treatment to be very successful.

**B.** *Read and compare the following sentences.*

The patients saw the doctor enter the ward.	Хворі бачили, що лікар зайшов до палати.
He felt the pain increase.	Він відчував, що біль посилювався.
The students watched the nurse give an injection.	Студенти спостерігали, як медсестра робить укол.

Якими дієсловами виражений присудок і що нового ви помітили в конструкції складного доповнення? (Див. граматичний довідник, стор. 507).

2) *Find the complex object in these sentences and translate them.*

1. The dentist saw the manifestations of the disease associated with the pulp death. 2. The surgeon noticed the amount of pus in the mucopurulent discharge from the wound have been decreasing. 3. The investigator observed the colour changing of the filling become evident.

**C.** 1) *Read and compare the following sentences and pay attention to participles:*

1. We saw him train.	Ми бачили, як він тренується.
2. We saw him training.	

1. I watched the doctor examine the patient.	Я спостерігав, як лікар оглядає хворого.
2. I watched the doctor examining the patient.	

2) Find the complex object. Say what part of speech it is expressed with. Translate the sentences:

1. I felt the pain increasing gradually. 2. We watched the tooth appearance changing. 3. We saw the material filling the cavity completely.

II. Translate and learn the following words and word combinations.

accidental	[.æksi'dentl]	fracture	[ˈfræktʃə]
allow	[ə'laʊ]	moisten	[ˈmɔɪstn]
apparent	[ə'pærənt]	ordinary	[ˈɔ:dɪnri]
blow	[bləʊ]	prominent	[ˈprɒmɪnənt]
chain	[tʃeɪn]	response	[ri'spɒns]
consider	[kən'sɪdə]	similar	[ˈsɪmɪlə]
determine	[dɪ'tə:mɪn]	spray	[spreɪ]
drill	[drɪl]	stick	[stɪk]
ensue	[ɪn'sju:]	suffice	[sə'faɪs]
flame	[fleɪm]		

III. Read the text «Endodontics», translate it. Find the sentences where the complex object is used.

## ENDODONTICS

Endodontics is the term used for all forms of root canal therapy. It includes root filling, pulpotomy, pulp capping and apicectomy. Everyone considers them to be very unpleasant procedures. Pulpitis always leads to pulp death. This in turn eventually leads to an acute alveolar abscess, which is a very painful condition. To prevent this chain of events, endodontic treatment or extraction is required whenever the pulp is inflamed or dead, or when an alveolar abscess is already present. The basic object of endodontic treatment is to remove the inflamed or dead pulp and replace it with a root filling. This removes the source of irritation which causes alveolar abscess. It will also allow drainage and complete cure of an existing abscess. The root-filled tooth will then function just *as well as*<sup>1</sup> one with a normal pulp. There are many causes of pulpitis and pulp death but the treatment is similar in each case; *either extraction or endodontics*<sup>2</sup>. The com-



most common cause of pulpitis is EXPOSURE of the pulp. This allows mouth bacteria to enter the pulp chamber and infect the pulp. Exposure of the pulp may be due to:

1. Caries.
2. Accidental exposure during cavity preparation.
3. Fracture of the crown.

Even when the pulp is not exposed, pulpitis can still occur. The causes are:

1. Irritant filling;  
e.g. unlined silicate or acrylic.
2. Excessive heat during cavity preparation;  
e.g. use of air turbine handpiece without water spray.
3. Impact injury.

Impact injuries are noticed to be common in children with prominent front teeth. The crown may fracture and expose the pulp. Alternatively the crown remains intact but the blow damages the apical blood vessels and the dentist sees pulp death ensue.

The dentist's decision on whether to treat a decayed tooth by an ordinary filling, endodontics or extraction, depends on the state of the pulp. If it is dead, endodontics or extraction is necessary. If it is alive and unexposed, an ordinary filling will suffice.

The state of the pulp is not always apparent and vitality tests are often required to determine whether it is alive or dead. These tests depend on the painful response of the pulp to certain *stimuli*<sup>3</sup>. If there is a response the pulp is vital; if not, it is probably dead.

The following tests are used:

1. Heat.  
A stick of gutta-percha is heated in a flame and applied to the crown of the tooth.
2. Cold.  
Cotton wool moistened with ethyl chloride is applied to the crown.
3. Electricity.  
An electric pulp tester is applied to the crown.
4. Drilling.  
Cavity preparation without local anaesthesia is painful when the pulp is vital.
5. X-ray.

Alveolar abscess on a dead tooth will show on an X-ray film.

## Notes

<sup>1</sup> **as well as** — так добре, як

<sup>2</sup> **either extraction or endodontics** — або видалення, або ендодонтичне лікування

<sup>3</sup> **stimuli** — подразники

## Class Assignments

**IV. Exercise 1.** Find in the text English equivalents for the following words and word combinations.

1. пломбування каналів. 2. спричиняти. 3. у свою чергу. 4. ланцюжок подій. 5. джерело подразнення. 6. у кожному випадку. 7. проникати до пульпової камери. 8. надмірне нагрівання. 9. відповідати. 10. тест на життєздатність пульпи. 11. прикладати до. 12. рентгенівський знімок.

**Exercise 2.** Quote the sentences in which these words and word combinations are used.

root canal therapy, to be required, to replace, complete cure, allow, to be noticed, intact, the state of the pulp, to be apparent, stimuli, to be heated, local anaesthesia.

**Exercise 3.** Make the necessary substitutions and reproduce the dialogues.

1. — What may exposure of the pulp be due to?

— It may be due to **caries**.

(accidental exposure during cavity preparation; fracture of the crown)

2. — What vitality tests do you know?

— They are different. For example, **a stick of gutta-percha is heated in flame and applied to the crown of the tooth.**

(cotton wool moistened with ethyl chloride is applied to the crown; an electric pulp tester is applied to the crown; alveolar abscess on a dead tooth will show on an X-ray film)

**Exercise 4.** Answer the questions.

1. What does endodontics include? 2. What does pulpitis lead to?

3. When is endodontic treatment required? 4. What is the basic



object of endodontic treatment? 5. How will the root-filled tooth then function? 6. What is the commonest cause of pulpitis and why? 7. Can pulpitis still occur when the pulp is not exposed? 8. Why are impact injuries common in children with prominent front teeth? 9. What does the dentist's decision of how to treat a decay tooth depend on? 10. Why are vitality tests necessary? 11. What tests are used?

**Exercise 5.** *Insert prepositions where necessary.*

## **CHOICE OF TREATMENT**

In deciding whether to treat ... extraction or endodontics, several factors are considered.

Extraction is the surest, quickest and simplest line ... treatment, whereas endodontics may entail several visits. Therefore, endodontic treatment is not undertaken unless the patient has a well maintained mouth; prefers not to have an artificial replacement; is agreeable ... the prolonged treatment involved; and fully aware ... the possibility of ultimate failure.

Many technical difficulties beset endodontic treatment ... multirooted teeth and ... this reason they are often extracted instead. Endodontic treatment is most likely to be successful ... easily accessible single-rooted teeth, and is therefore confined mainly ... incisors and canines. Premolars and molars are often extracted; but they can be saved ... endodontic treatment when necessary. Root filling is usually done ... two stages. ... the first visit the pulp is removed; after which the root canal is enlarged and cleaned. A dressing is then inserted ... sterilize the root canal.

... the second visit the root canal should be sterile. IF so, the dressing is removed and a permanent root filling inserted.

**Exercise 6.** *Make up twelve questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Ендодонтія — термін, котрий вживається для всіх форм лікування кореневих каналів зуба. 2. Пульпіт переважно призводить до втрати життєздатності пульпи. 3. Стоматолог визначає форму лікування лише після того, як обстежить пульпу

на життєздатність. 4. Видалення зуба — найпростіший спосіб лікування, проте далеко не найкращий. 5. Дуже багато зубів можна врятувати, якщо правильно проводити ендодонтичне лікування. 6. Зуб із запломбованими каналами буде ще довго функціонувати, як і звичайний зуб. 7. Всі вважають, що пломбування каналів — дуже неприємна процедура. 8. Часто виникає потреба у проведенні тесту на життєздатність пульпи, оскільки важко визначити на око чи життєздатна вона, чи ні. 9. Препарування порожнини, коли пульпа ще життєздатна, болюча процедура. 10. Пломбування каналів, як правило, здійснюється за два відвідування. 11. Стоматолог визначив, що пульпа ще життєздатна.

## LESSON 23

### Home Assignments

I. 1). *Translate the words with the same root into English:*

*sufficient* — недостатній, недостатність, досить;  
*locate* — розташований, місцевий, розташування;  
*involve* — пошкоджений, пошкодження;  
*prepare* — препарат, підготовлений;  
*limit* — обмежений, обмеження.

2). *Find the words with same root and group them.*

dilate, disturb, eliminate, unit, different, dilated, union, eliminated, differ, recurrence, dilation, disturbance, elimination, unite, recur, difference, undilated, unity, disturbing.

II. 1. *Translate and learn the words.*

deficient	[di'fɪʃnt]	raise off	[reiz]
dressings	[ˈdresɪŋ]	resemble	[ri'zembəl]
entire	[ɪn'taɪə]	saline	[ˈseɪlən]
expose	[ɪk'spəʊz]	scrap away	[skræp]
escape	[ɪ'skeɪp]	seal	[si:l]
flap	[flæp]	stump	[stʌmp]
heal	[hi:l]	surround	[sə'raʊnd]



incision	[in' sɪʒn]	survive	[sə' vaɪv]
overlying	[ouvə' laɪŋ]	suture	[` sju:tʃə]
purpose	[` pə:pəs]	syringe	[si' rɪndʒ]

2. Read and translate the words and word combinations.

**heal** [hi:l] — healed, healing, the wound healed up, healer, the progress of healing;

**flap** [flæp] — flap of the gum, to raise off a flap, the flap is sutured back;

**suture** [ˈsju:tʃə] — absorbable suture, bone suture, catgut suture, sutureless.

III. Read the text «Pulpotomy and Apicectomy», translate it.  
Write down the translation of the part «Procedure».

## PULPOTOMY AND APICECTOMY

In adults, conservative treatment of an exposed vital pulp is by root filling. But in children, growth of the root is not yet complete and an exposed tooth may still have a wide open apex, instead of the minute apical foramen. Root filling is unnecessary for these teeth as pulp death does not occur. Instead, only the infected part of the pulp in the pulp chamber is removed — a procedure known as PULPOTOMY. The very rich blood supply through an open apex *allows healing to occur*<sup>1</sup>; the pulp survives and growth continues to its natural completion. In fully grown teeth such healing is impossible and that is why the entire pulp must be removed and a root filling inserted.

The procedure in pulpotomy is similar to root filling *insofar as*<sup>2</sup> a sterile technique is necessary. The pulp chamber is opened and the pulp tissue is removed from the pulp chamber only. The amputated pulp stump at the entrance to the root canal is then covered with a CALCIUM HYDROXIDE dressing. This allows the pulp in the root canal to form a layer of new dentine over itself. The pulp is thereby completely sealed off again, as it was before the exposure occurred, and normal growth continues. Apicectomy is an operation for removal of an infected apex and the surrounding alveolar abscess. The purpose of apicectomy is to save the tooth in cases where root filling is unsuccessful or impossible. It is the final alternative to extraction and is done for

the following reasons:

1. Root filling unsuccessful.
  - (a) Incomplete filling of inaccessible canal.
  - (b) Escape of irritant cement through apex.
2. Root filling impossible.
  - (a) Canal blocked by broken instrument.
  - (b) Alveolar abscess on *tooth with post crown*<sup>3</sup>.

#### *Procedure*

1. An incision is made in the gum and a flap raised off the bone with a periosteal elevator.
2. Using a straight handpiece and burs, a window is cut in the overlying bone to expose the infected apex.
3. The apex is cut off and infected tissue surrounding it *is scrapped away*<sup>4</sup> with a CURETTE, which resembles a large excavator.

The cut end of the root is then examined to see if the remaining root filling is deficient. If so, a bit more filling is inserted in the cut end. Cement or amalgam is used and the procedure is known as retrograde root filling.

4. Debris is removed by syringing with sterile saline and the gum flap is sutured back into place.
5. Sutures are removed a few days later and an X-ray is taken for record purposes. *By comparing*<sup>5</sup> this X-ray with future ones, the progress of healing can be observed.

#### **Notes**

- 1 ***allows healing to occur*** — сприяє загоюванню
- 2 ***insofar as*** — і також, як і там
- 3 ***tooth with the post crown*** — зуб зі штифтовою коронкою
- 4 ***is scrapped away*** — зішкрібається
- 5 ***by comparing*** — порівнюючи

#### **Class Assignments**

**IV. Exercise 1.** *Find in the text English equivalents for these words and word combinations.*

1. оголена життєздатна пульпа. 2. інфікована частина пуль-



пи. 3. природний кінець. 4. на вході до кореневого каналу. 5. утворити шар нового дентину. 6. цілковито запечатана. 7. інфікований апекс. 8. альтернатива видаленню. 9. важко-прохідний канал. 10. робити розріз. 11. зішкрібати. 12. ретроградне пломбування каналу. 13. зняти шви. 14. процес загоювання.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

in children, instead, survive, sterile technique, amputated, completely sealed off, surrounding alveolar abscess, incision, to be cut off, a bit more filling, to be sutured back, to be observed.

**Exercise 3.** *Answer these questions.*

1. Why isn't it possible to use conservative treatment of an exposed vital pulp in children? 2. What procedure is used instead? 3. What allows healing to occur? 4. Why must the entire pulp be removed in fully grown teeth? 5. From what part is pulp tissue removed? 6. With what is the amputated pulp stump at the entrance to the root canal covered? 7. Is the pulp completely sealed off again? 8. What is apicectomy? 9. Why is it the final alternative to extraction?

**Exercise 4.** *Insert articles where necessary.*

## PULP CAPPING

When ... vital pulp is exposed, either ... root filling or ... pulpotomy is necessary to conserve the tooth. This cannot always be done immediately as pulp exposure often occurs unexpectedly or presents as ... emergency.

In such ... cases pulp capping is ... valuable temporary measure. ... exposure is covered with calcium hydroxide paste or Ledermix and ... cavity is filled with ... temporary cement. This prevents pain and protects ... pulp from infection until ... root filling or pulpotomy are performed.

**Exercise 5.** *Complete the sentences according to the text.*

1. An incision is made in the gum and ...
2. The apex is cut off and ...

3. Debris is removed by syringing with sterile saline and ...
4. Sutures are removed in a few days later and ...

**Exercise 6.** *Insert the missing words given below.*

Chronic pulpitis may ... in cases in which there is no perforation of the pulp chamber, or else it may be seen in cases in which a ... has occurred. A large perforation in a young tooth with ... apical pulp canal results in hypertrophy of the pulp.

Chronic pulpitis in most cases requires pulp ..., or if the infection has gone beyond the pulp canal, ... of the tooth. Sometimes in the partial chronic pulpitis ... can be recommended.

(extirpation, pulpotomy, extraction, occur, wide, perforation)

**Exercise 7.** *Make up 10 questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Make up sentences, using the following words.*

1. Filling, is, treatment, root, conservative, vital, of, exposed, an pulp.
2. Apicectomy, to save, is, purpose, the, of, tooth, the.
3. Are, sutures, a, removed, few, in, days.
4. Place, the, flap, is, into, sutured, gum, back.

**Exercise 10.** *Translate into English.*

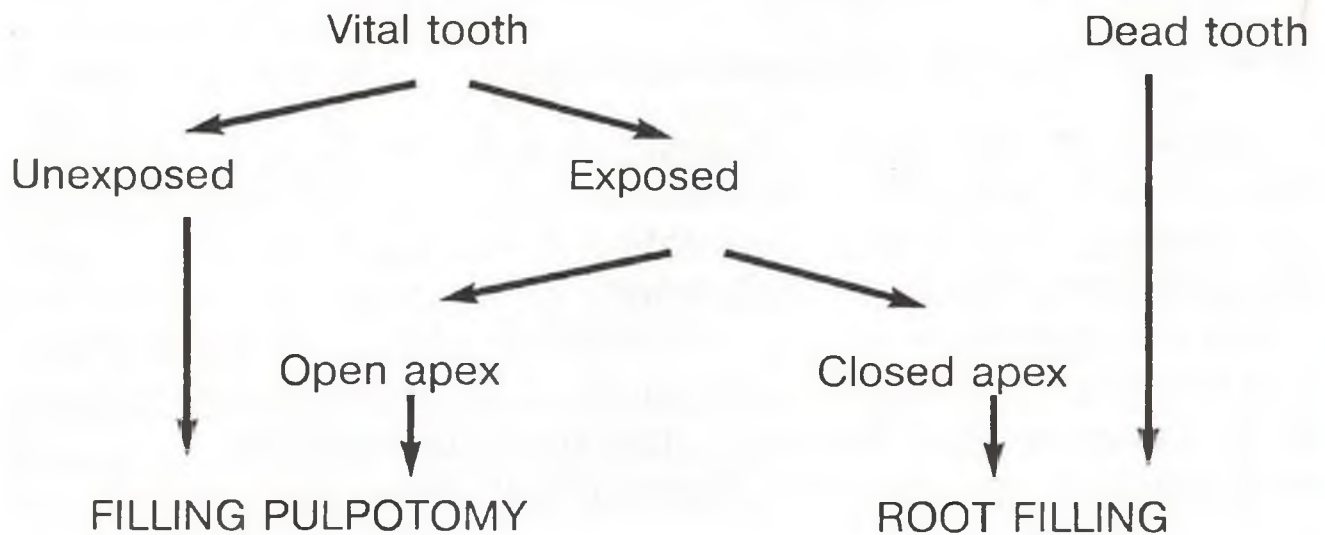
1. У дитячому віці пломбування кореневих каналів неможливе, тому що ріст корня ще не завершений. 2. Життєздатність та ріст пульпи триватимуть у тому разі, коли видалено лише її інфіковану частину. 3. Кореневий канал покривають гідроксидом кальцію, що дає змогу пульпі цього кореневого каналу утворити шар нового дентину. 4. Пульпа цілковито запечатується, як це було до її оголення. 5. Мета апексектомії — врятувати зуб там, де пломбування каналів неможливе.

**Exercise 11.** *Speak on the following topics using the sentences.*

1. **CONSERVATIVE TREATMENT OF CARIES.**
2. **VITALITY TESTS.**
3. **CAUSES AND EFFECTS OF PULPITIS.**



### 1. Conservative Treatment of Caries



### 2. Vitality Tests

Heat .....gutta-percha.

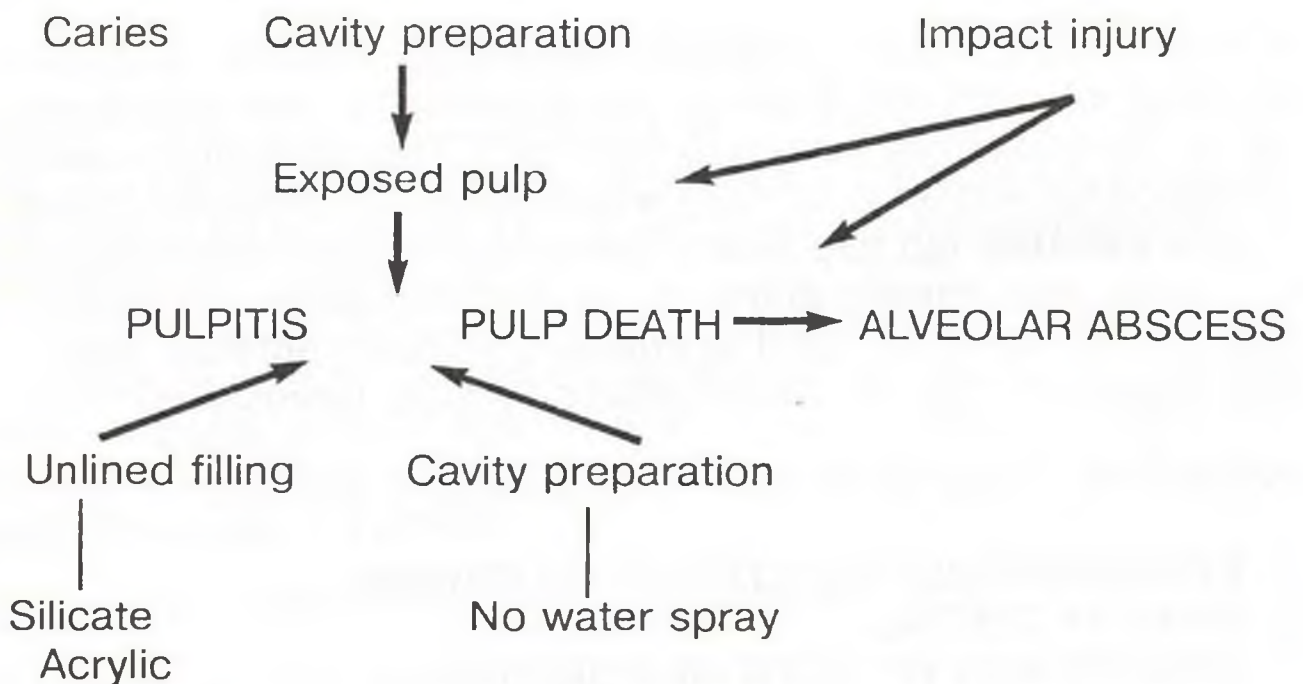
Cold.....ethyl chloride.

Electricity.....electric pulp tester.

Drilling .....without local anaesthesia.

X-ray .....shows abscess.

### 3. Causes and Effects of Pulpitis



## LESSON 24

### Home Assignments

I. *Translate the words and learn them.*

aggravate	[ˈægrəveɪt]	slight	[slaɪt]
attract	[əˈtrækt]	soak	[souk]
crevice	[ˈkrevis]	solid	[ˈsɒlɪd]
destroy	[diˈstrɔɪ]	spread	[spred]
duct	[dʌkt]	swollen	[ˈswɒlən]
involve	[ɪnˈvɒlv]	tartar	[ˈtɑ:tə]
plague	[plɑ:k]	tenacious	[tiˈneɪʃəs]
poison	[ˈpɔɪzn]	ulcerate	[ˈʌlsəreɪt]
provide	[prəˈvaɪd]	value	[ˈvælju:]
puberty	[ˈpjʊ:bəti]	vast	[vɑ:st]
pus	[pʌs]	vicious	[ˈviʃəs]
scale	[skeɪl]		

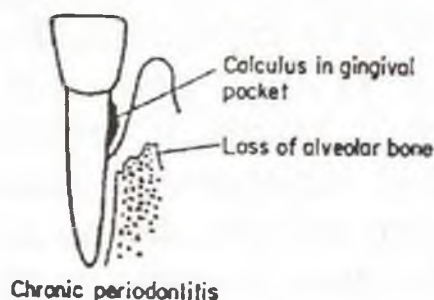
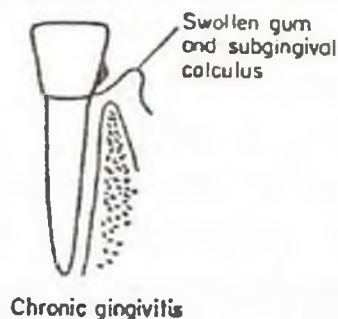
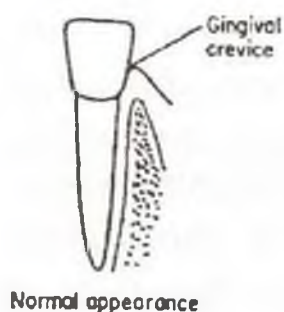
II. *Read the text «Periodontal Disease». Translate it and divide it into logical parts.*

### PERIODONTAL DISEASE

PERIODONTAL DISEASE affects the supporting structures of the teeth. These are the gums, periodontal membrane and alveolar bone. The earliest stage of the disease is CHRONIC GINGIVITIS which is a chronic inflammation *involving the gums alone*<sup>1</sup>. If allowed to continue, however, it spreads to the underlying periodontal membrane and alveolar bone. These are gradually destroyed and the teeth become very loose<sup>2</sup> as their supporting tissues are lost. The name given to this late stage of the disease is CHRONIC PERIODONTITIS or pyorrhoea. Periodontal disease is caused by accumulation of food debris at the gum margin. This stagnating food debris forms a tenacious film, called PLAQUE, which attracts vast numbers of bacteria and gives rise to inflammation of the gum margin. At the same time, TARTAR formation occurs below the gum margin. Tartar or CAL-



CULUS is the hard rock-like<sup>3</sup> deposit commonly seen on the lingual surface of lower incisors. Three factors are necessary for its formation — food debris, bacteria and saliva. The bacteria which live on the stagnating food debris act on saliva to produce a deposition of calculus — which may therefore be described as solidified stagnation. It is most often seen opposite the orifices of salivary gland ducts — on the lingual surface of lower incisors and buccal surface of upper molars. However, it may occur below the gum margin on all teeth, and in this situation is known as SUBGINGIVAL CALCULUS. Subgingival calculus occurs in a tiny crevice which is normally present between the gum margin and neck of the tooth. The combined effect of the plaque and subgingival calculus in this GINGIVAL CREVICE is to irritate the gum and produce a chronic gingivitis. In this condition the gum becomes swollen, thus greatly enlarging<sup>4</sup> the gingival crevice. A vicious circle is now established: the enlarged crevice forms a pocket round the tooth, in which much more food debris can accumulate; further deposits of plaque and calculus are thereby formed; and these irritants keep up the inflammation. Jagged scales of calculus, and bacterial poisons from the plaque, ulcerate the gum and bleeding occurs on the slightest pressure. The poisons soak through the ulcers to commence destruction of the periodontal membrane and alveolar bone; and whilst this is



progressing, the gingival pocket deepens, thus further aggravating the condition. This stage of the disease is called chronic periodontitis. If no treatment is provided, so much bone is lost that the teeth eventually become too loose to be of any functional value<sup>5</sup>.

This description of periodontal disease follows a course of several years, but during that time pus and bacteria in the pock-

ets may affect the general health. Once periodontal disease is actually established it can be made worse by certain other factors, which do not in themselves cause the disease. Some of these aggravating factors are open lips, unbalanced masticatory stress, puberty and pregnancy.

## Notes

- 1 ***involving the gums alone*** — що пошкоджує лише ясна
- 2 ***become very loose*** — стають дуже рухомими
- 3 ***hard rock-like*** — тверде, ніби камінь
- 4 ***thus greatly enlarging*** — за рахунок цього збільшуючи
- 5 ***to be of any functional value*** — щоб мати яку-небудь функціональну цінність

## Class Assignments

III. Exercise 1. Find in the text English equivalents for the following words and word combinations.

1. пародонт. 2. періодонт. 3. кісткова тканина альвеоли. 4. хронічний пародонтит. 5. утворення зубних відкладень. 6. мікробна зубна бляшка. 7. зубний камінь. 8. затверділе відкладення. 9. протоки слинних залоз. 10. утворити кишеню. 11. при найменшому тискові. 12. впливати на загальний стан здоров'я. 13. тривати кілька років.

Exercise 2. Quote the sentences in which these words and word combinations are used in the text.

chronic inflammation, supporting tissues, gum margin, lingual surface, act on saliva, tiny crevice, swollen, jagged scales of calculus, gingival pocket, functional value, pus and bacteria, puberty.

Exercise 3. Answer the questions.

1. What does periodontal disease affect? 2. What periodontal disease do you know? 3. How can you characterize chronic gingivitis? 4. What happens if it spreads? 5. What is the cause of periodontal disease? 6. Why isn't plaque formation desirable?



7. When is tartar usually seen? 8. What three factors are usually necessary for its formation? 9. Where does subgingival calculus occur? 10 . What produces chronic gingivitis? 11. Why does bleeding occur on the slightest pressure? 12. What do you know about chronic periodontitis? 13. What factor can make periodontal disease worse?

**Exercise 4.** *Insert articles where necessary.*

Prevention of ... periodontal disease is rather similar to that of ... caries as both originate from stagnation of food debris on ... teeth. In caries ... food debris exerts its effect by acid formation, whereas in periodontal disease it is by bacterial irritation and calculus formation. Prevention consists of ... parts played by both patient and dental surgeon.

It is ... patient's responsibility to clean ... teeth after every meal, in order to remove residual food from ... teeth and massage ... gums. This prevents plaque formation. Furthermore he must regularly attend for dental inspection, and any necessary treatment, twice ... year, every year.

Preventive dental treatment involves many branches of ... dentistry: scaling, to remove any calculus before it has time to cause gingivitis; fillings, to restore contact points and prevent food packing between ... teeth; orthodontics, to correct irregularities and encourage lip closure; prosthetics, to restore function to unopposed teeth and evenly distribute ... stress of mastication over all ... teeth. As in ... case of caries, ill-fitting partial dentures must be replaced by new ones, correctly designed to avoid food stagnation at ... gum margins.

**Exercise 5.** *Point out in the text sentences expressing the relationship of cause-effect.*

e.g. Periodontal disease is caused by accumulation of food debris at the gum margin — Periodontal disease affects the supporting structures of the teeth.

**Exercise 6.** *Insert prepositions where necessary.*

Plaque ... the gum margins and subgingival calculus are the

primary causes of periodontal disease. Therefore, treatment consists essentially ... scaling, which is the removal of calculus ... the teeth, and polishing to remove the plaque. Once this has been achieved, the sources ... irritation are lost; the swollen gums return ... their normal healthy condition and gingival pockets are thereby eliminated. There is no regeneration ... lost bone, however, so strict oral hygiene and regular dental treatment are required thereafter to prevent recurrence ... plaque and calculus formation.

... advanced periodontal disease, scaling alone cannot suffice to eliminate gingival pockets completely. ... such cases they are removed surgically by GINGIVECTOMY. This operation consists ... cutting away the gum forming the pockets.

**Exercise 7.** *Make up 12 questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Translate into English.*

1. Термін «хвороба пародонту» об'єднує захворювання, при яких пошкоджується комплекс навколозубних тканин: ясна, кісткова тканина альвеоли та періодонт. 2. Коли пошкоджені лише ясна, можна говорити про хронічний гінгівіт. 3. Якщо не лікувати гінгівіт, то він перейде в хронічний пародонтит. 4. Захворювання пародонту — одна з найскладніших проблем стоматології. 5. В етіології захворювань пародонту важливе місце серед місцевих факторів посідає відкладення на зубах. 6. Мікробна бляшка — головна причина захворювання пародонту. 7. Токсини мікроорганізмів спричиняють захворювання ясен. 8. У подальшому запалення ясен поширюється на кісткову тканину альвеоли. 9. Мікробні токсини впливають на всю імунну систему людини. 10. Якщо захворювання не лікувати, може виникнути резорбція кістки, і зуби не будуть спроможні виконувати свою функцію.

**Exercise 10.** *Read the text. Write out the sentences characterizing:*

- 1) the appearance of the affected gum;
- 2) the feature of acute inflammation;
- 3) drugs commonly used in this case.



## ACUTE ULCERATIVE GINGIVITIS

ACUTE ULCERATIVE GINGIVITIS or VINCENT'S disease is a complication of periodontal disease. It is an acute gingivitis characterized by pain and halitosis (bad breath). The affected gum appears bright red, with a covering layer of grey membrane where the gum margin has been destroyed by bacterial action. The responsible bacteria are BACILLUS FUSIFORMIS and TRE-PONEMA VINCENTI. All the features of acute inflammation are present: red swollen painful gums; loss of function, because it is too painful to chew hard food; and the patient often has a raised temperature.

It occurs mainly in areas already affected by chronic gingivitis, and also around erupting lower wisdom teeth. In many cases a lowered general resistance precipitates an attack; thus it is more common in winter when colds, influenza and other infections are rife. Principles of treatment are to kill the bacteria responsible for the painful acute inflammation, and follow this by scaling to cure the preceding chronic gingivitis.

PENICILLIN or METRONIDAZOLE are often given to kill the bacteria, administered internally in the form of tablets. Prior to the advent of penicillin, drugs commonly used for this purpose were CHROMIC ACID and HYDROGEN PEROXIDE. 10 per cent chromic acid applied to the gums is a caustic which kills bacteria. Hydrogen peroxide (10 volumes) applied a few minutes later reacts with the chromic acid to liberate oxygen, which also kills these particular bacteria. But whichever drugs are used to kill the bacteria, it is always necessary to scale the teeth afterwards to prevent a recurrence. Throughout treatment, sodium perborate (Bocasan) or hydrogen peroxide mouth-washes are often used to help keep the mouth clean.

## LESSON 25

### I. Remember:

За допомогою префікса **dis-** утворюються слова з протилежним значенням: *to continue* — тривати; *to discontinue* — зупиняти

1) *Read and translate:*

disappear, discovery, discolouring, discomfort, disability, disorder, dislodge.

Префікси **a-, ab-, be-, com-, con-, de-, ex-, per-, pre-** завжди ненаголошені

2) *Read:*

aloud, adsorption, become, complete, conclusion, exchange, perform, defeat, explain, prevent, declare, detect, compressed.

За допомогою суфікса **-ize** [aiz] утворюються дієслова. Варіанти цього суфікса — **-yze, -ise**: summarize — резюмувати; analyze — аналізувати.

3) *Read and translate:*

realize, generalize, specialize, recognize.

II. 1. *Read and translate these words:*

aspirator	[ˈæspəreɪtə]	method	[ˈmeθəd]
design	[diˈzaɪn]	periodic	[piəriˈɒdɪk],
ejector	[iˈdʒektə]	scaling	[ˈskeɪlɪŋ]
hygiene	[ˈhaɪdʒiːn]	tube	[tjuːb]

2. *Translate and learn the following words and word combinations:*

bib	[bɪb]	inevitable	[ɪnˈevɪtəbl]
detect	[diˈtekt]	napkin	[ˈnæpkɪn]
direct	[diˈrekt]	onset	[ˈɒnsət]
entail	[ɪnˈteɪl]	recurrence	[rɪˈkərəns]
futile	[ˈfjuːtaɪl]	sharp	[ʃa:p]
hold	[hould]	wipe	[waɪp]

III. *Read the text, translate it and analyze its structure.*

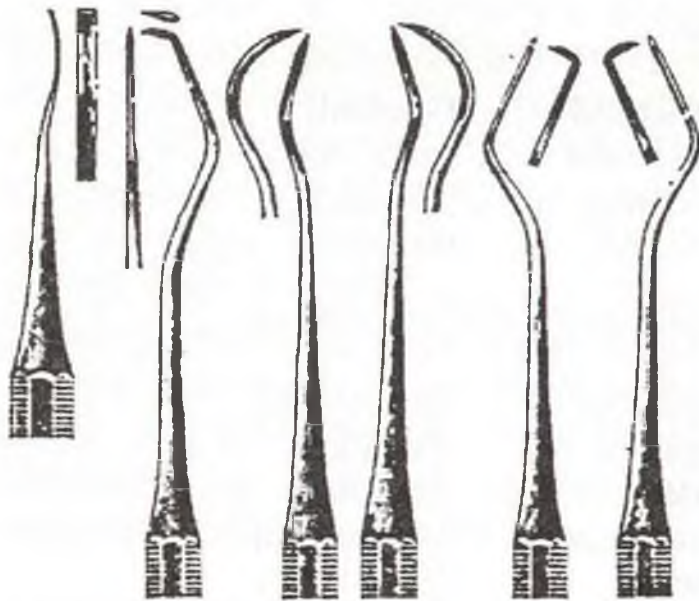
## SCALING AND GINGIVECTOMY

Scaling and gingivectomy are performed for the treatment of periodontal disease. Scaling, which is removal of calculus and plaque, is the most important means of treatment; indeed any



other method is futile unless scaling is done as well. Regular periodic scaling can help prevent the onset of periodontal disease and will cure established cases with shallow gingival pockets. In advanced periodontal disease, gingivectomy followed by scaling is necessary for the elimination of deep pockets.

When the condition is cured it is *by no means*<sup>1</sup> the end of the matter. Unless the patient takes meticulous care over oral hygiene and attends for regular inspection and treatment, recurrence of the disease is inevitable. Scaling instruments are made *in various designs*<sup>2</sup> appropriate for the removal of calculus from any part of a tooth. In general they are single-ended hand instruments with a very sharp end for dislodging scales of calculus. A CALCULUS PROBE is used to detect subgingival calculus. When scaling is completed, *which may take a few visits*<sup>3</sup>, the teeth are polished. This removes plaque and is done with a handpiece, small brushes or rubber cups, and polishing paste.



**Scaling instruments**

The most dangerous form of calculus is the subgingival type, and its removal entails much instrumentation in the gingival crevice. This, in addition to the gingivitis already present, produces considerable bleeding. The patient therefore requires a bib and *saliva ejector*<sup>4</sup>. A supply of napkins is necessary for wiping the instruments during scaling, together with suction and a compressed air syringe or spray for keeping the area clear of blood. The nurse is

often required to direct the spray for the operator or hold an aspirator tube.

Now there exist ultra-sound scalers which make the procedure of scaling painless.

## Notes

- 1 **by no means** — в жодній мірі
- 2 **in various design** — різноманітних конструкцій
- 3 **which may take a few visits** — на що може знадобитися кілька відвідувань
- 4 **salivar ejector** — слюновідсос

## Class Assignments

**Exercise 1.** Find in the text English equivalents for the following words and word combinations.

1. насправді. 2. доти, доки. 3. початок захворювання пародонту. 4. усування глибоких ясеневих кишень. 5. рецидив захворювання. 6. неминучий. 7. для видалення. 8. дуже гострий кінець. 9. виявити. 10. гумові чашки. 11. сильна кровотеча. 12. набір серветок. 13. видалити кров з цієї ділянки.

**Exercise 2.** Quote the sentences in which these words and word combinations are used in the text.

to be performed, means of treatment, shallow gingival pocket, unless, to be used, to be polished, to entail, to wipe the instruments, to be required.

**Exercise 3.** Find **ing**-forms in the text and define their function (див. граматичний довідник, стор. 496).

**Exercise 4.** Answer these questions.

1. Why are scaling and gingivectomy performed? 2. What is scaling? 3. Can it help to prevent the onset of periodontal disease? 4. What treatment is necessary in advanced periodontal disease? 5. When is recurrence of the disease inevitable? 6. What are the demands for scaling instruments? 7. What instrument is used to detect subgingival calculus? 8. What instrument remove plaque? 9. Why is the subgingival form of calculus the most dangerous one? 10. What other things are necessary while scaling?



**Exercise 5.** *Insert prepositions where necessary.*

Removal ... visible 'tartar' ... the crowns of teeth is usually a painless procedure, but removal ... subgingival calculus can be rather uncomfortable. To avoid pain a surface anaesthetic is often applied, whilst a local anaesthetic injection may be necessary ... subgingival scaling ... deep pockets. After scaling, many operators apply tincture ... iodine to the gum margins for its antiseptic and astringent (hardening) action ... inflamed gum. In some cases zinc oxide and eugenol cement packs, as used ... gingivectomy, are applied ... scaling to exert pressure on the gum and reduce inflammatory swelling.

**Exercise 6.** *Organize the following antonyms in pairs.*

to die, good, death, life, chronic, to live, acute, bad.

**Exercise 7.** *Form nouns from the following verbs and translate them.*

to treat, to assist, to detect, to move, to measure, to attach, to observe, to continue, to compare, to select, to indicate, to determine.

**Exercise 8.** *Form nouns from the following verbs and translate them.*

**Exercise 9.** *Give a summary of the text.*

**Exercise 10.** *Translate into English.*

1. Лікування гінгівіту треба розпочинати з видалення м'яких і твердих відкладень на зубах та навчання правильному дотриманню гігієни ротової порожнини. 2. Для видалення зубних відкладень користуються спеціальним набором інструментів. 3. Після видалення зубного каменя поверхню полірують гумовими чашками чи щітками із застосуванням пасти. 4. Видалення зубних відкладень спричиняє значну кровотечу ясен. 5. Регулярне знімання зубних відкладень може запобігти виникненню захворювань пародонту, проте пацієнти переважно звертаються до лікаря надто пізно. 6. Гінгівектомія застосовується в тому разі, коли консервативне втручання не дає бажаних результатів. 7. Зараз зубні відкладення можна безболісно зняти за допомогою ультразвукового скейлера.

**Exercise 11.** Read the text «Gingivectomy» and say what technique gingivectomy uses. Translate using the dictionary the names of the instruments given below.

## INSTRUMENTS REQUIRED FOR GINGIVECTOMY

Set out on sterile towel:

Aspirator tubes and saliva ejector.

Sterile towel and towel clip.

Mirror, probe and tweezers.

Local anaesthetic equipment.

Set of gingivectomy knives.

Swabs.

Gum packs.

## GINGIVECTOMY

Gingivectomy is the surgical removal of gum to eliminate pockets. It is minor oral surgery. A local anaesthetic is injected and the gum incised with a GINGIVECTOMY KNIFE. There are many different types of gingivectomy knife available but probably the most convenient is a BLAKE KNIFE. This uses detachable blades, thus allowing a new one to be used each time. The strip of incised gum is removed with tweezers and the raw area covered with a pack to protect the gum and promote rapid painless healing. The pack is removed about a week later and a thorough scaling is then performed. A widely used pack is zinc oxide and eugenol cement incorporated with cotton wool. However, there are various types of pack and each operator has his own preference. The spaces left between the teeth, formerly occupied by the removed gum are difficult to keep clean with a toothbrush alone. Patients are therefore instructed in the use of WOOD POINTS. These are soft wooden sticks which are passed through the spaces to keep them clear of food debris, prevent plaque formation and massage the gum. Failure





to perform this essential task regularly after meals will result in a reversion to the original condition of chronic periodontitis. Conservative treatment of periodontal disease by scaling and gingivectomy is a waste of time unless patients are prepared to cooperate by cleaning their teeth and massaging the gums after meals. When neglect is likely, extraction is the best treatment.

### Unit III. ORAL SURGERY

#### LESSON 26

#### FIRST STEPS IN ORAL SURGERY

**Граматика:** Незалежний дієприкметниковий зворот

#### Home Assignments

I. *Read the sentences, answer the questions and do the tasks.*

- a) Suffering from a severe toothache I went to the dentist      b) My friend suffering from a severe toothache I advised him to go to the dentist

1. Визначте підмет у реченнях. 2. Визначте присудок у реченнях. 3. Якою частиною мови виступає слово **suffering** у реченнях? 4. Яка синтаксична функція належить слову **suffering** у реченнях? 5. Зробіть переклад речення а) й визначте, хто страждав від нестерпного болю і хто пішов до стоматолога. 6. Хто страждав від сильного болю і хто дав пораду піти до лікаря у реченні b)? 7. Отже, чим виступає словосполучення **my friend** щодо дієприкметника **suffering** і як краще перекласти дієприкметник? (Див. граматичний довідник, стор.508)

1) *Find the Absolute Participle construction.*

1. Healing is by granulation, evacuation of the fluid content being the kind of surgical treatment. 2. There being profuse haemorrhage, the patient was immediately taken to hospital. 3. The tooth having been removed, the patient had no recurrence of the violent pain. 4. Ten of the patients were included in the experiment, the two others not being operated upon.

2) Translate the sentences, say what is missed in the Absolute Participle Constructions.

1. The results of trauma hard, the patient was admitted to the hospital. 2. The crown of the superior right cuspid of a man fractured, the root was removed. 3. Oral ulcerations present, the chief complaint was oral discomfort of two months' duration.

II. Translate and learn the following words:

branch	[bra:ntʃ]	luxate	[ˈlʌkseɪt]
comminute	[ˈkɒmɪnju:t]	replant	[riˈplɑ:nt]
denture	[ˈdentʃə]	totally	[ˈtəʊtli]
generally	[ˈdʒenərəli]	trauma	[trɔ:mə]

III. Read the text, translate it and find sentences with the Absolute Participle Construction.

## ORAL SURGERY

Oral surgery is the branch of dentistry concerned with the study of dental diseases, traumatic injuries and diseases of the teeth, jaws, oral tissues where surgical methods are used. Oral surgery is *closely connected with*<sup>1</sup> therapeutic dentistry, oral orthopedics, pediatric dentistry and a number of medical disciplines — therapy, surgery, radiology and others.

Surgical operations on teeth and the oral cavity have been known since ancient times. Tooth extraction is the most commonly used dental operation. It is usually performed in the cases where conservative treatment is unsuccessful. It helps to stop the spread of the inflammatory process on the surrounding tissues and to avoid complications.

Sometimes the tooth is extracted, it being the source of the infection as in acute osteomyelitis. In this case drainage should be established as soon as possible. The patient should have good general care. In some cases when the tooth is far gone and can't be restored it is necessary to extract it as well, and it's better to replace it by denture *in order to have good esthetic results and function*<sup>2</sup>. Teeth may be traumatized, the trauma being so severe that teeth become luxated, fractured, or even comminuted. In this case the prognosis may be unfavourable. A totally displaced tooth may be replanted but generally should be removed.



The anterior teeth are more often fractured than the posterior ones. Extraction of a tooth is the last alternative in its treatment. One should always remember that the loss of a single tooth can give rise to caries and periodontal disease in *at least*<sup>3</sup> three other teeth.

## Notes

<sup>1</sup> ***to be closely connected with*** — бути тісно пов'язаним з.

<sup>2</sup> ***in order to have good esthetic results and function*** — щоб одержати гарний зовнішній вигляд та відновити функціонування.

<sup>3</sup> ***at least*** — принаймні.

## Class Assignments

IV. **Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. хірургічна стоматологія. 2. травматичне пошкодження. 3. поширення запалення. 4. уникнути ускладнення. 5. джерело інфекції. 6. якнайшвидше. 7. замінити на протез. 8. реплантувати. 9. втрата одного зуба. 10. стати початком.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

Branch, ancient times, to be performed, surrounding tissues, drainage, in order to, comminuted, posterior teeth, at least.

**Exercise 3.** *Point out **it** in the third paragraph and say what they refer to.*

**Exercise 4.** *Sum up the text answering the following questions.*

1. What is oral surgery? 2. What other dental branches is it connected with? 3. When is tooth extraction usually performed? 4. What is the objective of tooth extraction? 5. When is drainage established? 6. Why is it better sometimes to replace the tooth by denture? 7. What can happen if teeth are traumatized? 8. Why is extraction of a tooth the last alternative in its treatment?

**Exercise 5.** *Insert articles where necessary.*

Anaesthesia of different kinds is widely used for ... dental treatment. There are ... occasional facilities in association with general anaesthesia for oral surgery. Other fatalities resulting from ... dental operative procedures in people with ... heart valvular defects, may also occur. Thus there are children and adults with medical conditions for whom ... consequence of dental disease and dental treatment are potentially so severe that special arrangements for their care are required.

**Exercise 6.** *Insert prepositions where necessary.*

The result of trauma of the jaws depends ... the fragility of the bones. It may produce periostitis, traumatic cyst or fracture.

Periostitis due ... trauma uncomplicated ... fracture is generally localized. It is frequently seen ... surgical operations as a post-operative complication or a facial injury.

The affected part ... the bone is extremely tender ... the touch. There is less or more swelling ... the periosteum and overlying soft tissue. Rise ... temperature indicates infection. Cold applications ... the injured part generally are sufficient ... simple periostitis. If there is infection, drainage should be established.

**Exercise 7.** *Make 10 questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Translate into English.*

1. Хірургічна стоматологія — один з розділів стоматології.  
2. Вона вивчає хвороби та травми зубів, щелеп, тканин ротової порожнини, обличчя та шиї.  
3. Хірургічна стоматологія застосовує методи діагностики та лікування такі ж, як в стоматології та інших розділах загальної патології.  
4. Досягнення теоретичних розділів біології та медицини застосовуються і в хірургічній стоматології.  
5. Хірургічні операції та маніпуляції на зубах, у ротовій порожнині, на обличчі та шиї відомі з давньої давнини.  
6. Багато віків хірургія зубів розвивалася повільно, оскільки була у руках цирульників та знахарів. До 1840-го ро-



ку стоматологи не мали спеціальної освіти. 7. В цей період був виданий перший посібник зі стоматології, до якого входила й зуболікувальна хірургія. У Франції були сконструйовані інструменти для видалення зубів. 8. Видалення зуба — це останній етап лікування. 9. Якщо зуб відновити неможливо, його видаляють, бо він може стати джерелом інфікування. 10. У дітей зуби видаляти треба обережно, щоб не пошкодити у щелепах наявні зачатки постійних зубів. 11. Зуб можна зламати, незважаючи на те, що він покритий найтвердішою тканиною людського організму — емаллю.

**Exercise 10.** *Speak on the topics.*

**1. TOOTH EXTRACTION IS THE MOST COMMONLY USED DENTAL OPERATION. 2. ORAL SURGERY AS A BRANCH OF DENTISTRY.**

## **Lesson 27**

### **HOME ASSIGNMENTS**

#### **I. Learn these patterns.**

1. I don't think it will help. — Вважаю, це не допоможе.

1) *Make up sentences using the table and translate them.*

I don't think	it is far gone you have any pain she is afraid of this procedure
---------------	--

2. To begin with it only . Спочатку він (зуб) трохи  
ached a little болів.

2) *Make up three sentences using pattern 2.*

#### **II. Translate and learn these words and word combinations:**

tongue	[tʌŋ]	feel dead	[ded]	nut	[nʌt]
--------	-------	-----------	-------	-----	-------

accident	[æksɪdənt]	grasp	[grasp]	stone	[stoun]
irregular	[ɪrˈregjələ]	twist	[twɪst]	save	[seɪv]
pull out	[pul]	artificial	[ɑːtiˈfɪʃl]	grateful	[ɡreɪtfl]
prick	[prɪk]	pale	[peɪl]		
forceps	[ˈfɔːsəps]	almost	[ˈɔːlməʊst]		

### III. Read and translate the dialogues.

#### A. AT THE DENTIST'S

*Dentist:* What's wrong, David?

*Patient:* I have a toothache. It's a lower tooth on the right.

— Is there a cavity?

— I don't think so. It is sensitive to heat and cold, besides I can't sleep at night.

— Let me have a look at it. There is a filling here, but I am afraid it has got loose. When did the ache appear?

— Two weeks ago.

— You should have come for a checkup long ago. You'd better have it X-rayed. (The dentist has the tooth X-rayed and then examines the picture). I am afraid I'll have to fill the root canal.

— Is it possible to restore the tooth?

— Yes, I'll clean the root canal and put a temporary filling because the inflammatory process has spread on the surrounding tissues. You'll come to me again tomorrow.

#### B. AT THE SURGEON'S

*Patient:* Good morning, doctor.

*Surgeon:* Good morning. What's the trouble?

— For a couple of days I have been having a pain in my tongue. You see some days ago I got into a car accident and fractured one of the teeth. It causes a terrible pain.

— Let me examine your teeth. You see, the irregular edges of the tooth irritate the tongue. So you know it's very dangerous because this can lead to serious complications. This tooth must be removed, I think.

— Well you have to pull it out? Isn't it better to have it X-rayed?



- Yes, certainly, but I don't think it will help. The tooth is loose.
- I am rather scared<sup>1</sup>, doctor.
- You needn't. I'll give you an injection. You'll see and hear everything, but you'll feel no pain. Let's have it X-rayed and I'll prepare the instruments for extraction. (After the X-ray picture is examined). Open your mouth, please. You will feel little pricks on the gum.
- Will you pull my tooth with these forceps?
- Yes, but don't be afraid. Does your mouth feel dead?<sup>2</sup>
- Yes, rather. (*The surgeon grips the tooth, gives a twist, then a pull, and the tooth is out*).
- It's all over, spit out, wash your mouth out with this disinfectant. You must replace it artificially in order to restore normal appearance and function.
- Thank you, doctor.

### **C. NO CHOCOLATE ANY MORE**

- Nick:* Come in, Peter. I am glad to see you. You look pale. Has anything happened to you?
- Peter:* I haven't had an accident, if that's what you mean<sup>3</sup>. But it has been almost as bad.
- I have just made tea. Sit down and have a cup and tell me what you have been up to<sup>4</sup>.
  - Last week I bought a packet of nut chocolate. I put a piece in my mouth and bit hard, and one of my teeth broke with a crack like a pistol shot! I spit out a large piece of tooth and a small stone.
  - Did your tooth hurt dreadfully?
  - To begin with it only ached a little but I woke up in the night with violent toothache. I had no more sleep that night. I've never been in such agony<sup>5</sup>. I rang up the dentist as soon as possible. I saw him the same day and he gave me a temporary filling. But the tooth was too badly damaged to be saved. So I went back to his surgery this morning and he took it out. I have just come from his surgery. I have lost my appetite, especially for chocolate, but I am grateful you have made a cup of tea.
  - I am sorry you have had such a dreadful time.

## Notes:

1. **I am rather scared.** — Я боюсь.
2. **Does your mouth feel dead?** — Чи не втратила чутливість ротова порожнина?
3. **if that's what you mean** — якщо ти це маєш на увазі.
4. **what you have been up to** — що з тобою трапилося?
5. **in such agony** — у такому жахливому стані

## CLASS ASSIGNMENTS

**IV.Exercise 1.** *Find in the dialogues English equivalents for these words and word combinations.*

1. там є порожнина?
2. вона (пломба) прилягає нещільно.
3. краще б вам.
4. запломбувати кореневий канал.
5. запальний процес поширився на оточуючі тканини.
6. кілька днів тому.
7. гострий край.
8. це може спричинити.
9. зуб розхитаний.
10. невелике поколювання.
11. замінити на штучний.
12. мати блідий вигляд.
13. надкусити.
14. нестерпний біль.
15. дуже зруйнований.
16. я вдячний.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the dialogues.*

At night, long ago, to clean the root canal, to spread, a couple of days, to cause a terrible pain, to irritate the tongue, to feel no pain, forceps, to feel dead, to restore normal appearance, almost, a packet of chocolate, to break with a crack, to wake up, to be saved, to loose one's appetite, dreadful time.

**Exercise 3.** *Explain the use of the Present Perfect Tense in the dialogues.*  
(Див. граматичний довідник, стор. 493)

**Exercise 4.** *Fill in the missing remarks. Reproduse the dialogues.*

1. Dentist: Sit down, please. What's wrong?  
Patient: ...  
— Is there a cavity?  
— ...



- Let me have a look at it. When did the ache appear?
- ...
- You'd better have it X-rayed.
- 2. — I'm afraid I'll have to fill the root canal.
- ...
- Yes, I'll clean the root canal and put a temporary filling.
- 3. — Good morning, doctor.
- ...
- For a couple of days I have been having a pain in my tongue. I fractured one of my teeth. It causes a terrible pain.
- ...
- 4. — Open your mouth, please. You will feel little pricks on the gum.
- ...
- Yes, but don't be afraid. Does the mouth feel dead?
- ...
- It's all over, spit out, wash your mouth out with this disinfectant.
- ...

**Exercise 5.** *Act as interpreter.*

*Nick:* Проходь, Петре. Радий тебе бачити. Що в тебе скоїлося? Ти дуже блідий.

*Peter:* I haven't had an accident, but I have had a dreadful time.

— Ти хворий?

— I have just come from the dental surgery.

— У тебе болить зуб?

— I woke up in the night with violent toothache. In the morning I rang up the dentist. I saw him in the afternoon and he gave me a temporary filling. But the tooth has been aching. It hurts dreadfully.

— Чи не краще його видалити?

— Yes, perhaps, but the dentist says that it is the last alternative in the treatment.

**Exercise 6.** *Translate into English.*

1. — Що сталося, Миколо?

- У мене болить зуб.
  - Там є порожнина?
  - Там стоїть плomba, але він реагує на гаряче або холодне.
  - А вночі зуб болить?
  - Так, я не можу спати вночі.
2. — Давайте оглянемо. Так, плomba стоїть, але боюся, вона прилягає не щільно. На мою думку, у вас пульпіт. Проте варто зробити рентгенівський знімок.
- Лікарю, зуб можна врятувати?
  - Так, видалення — це вже останнє при лікуванні.
3. — Що вас непокоїть?
- Я зламав зуб і тепер мені нестерпно болить.
  - Давайте оглянемо. Так, зуб дуже пошкоджений, щоб його врятувати. Проте краще зробити рентгенівський знімок, хоч я вважаю, що це не допоможе.
4. — Відкрийте рот, будь ласка. Не бійтесь, я зроблю укол і ви не відчуватимете болю.
- Ви видалятимете зуб зараз?
  - Так, але все буде гаразд. Зуб відновити вже неможливо.
5. — Ти такий блідий.
- Я щойно повернувся від стоматолога.
  - Що сталося?
  - У мене пульпіт, тому довелося пломбувати кореневі канали, а це не вельми приємна втіха.
6. — У тебе болить зуб?
- Так, я не спав цілу ніч. У мене ніколи не було такого нестерпного болю.
  - А яка думка стоматолога з цього приводу?
  - Зуб спробують врятувати, видалити можна будь-коли. Але треба мати витримку.

**Exercise 7.** *Make up dialogues on these situations.*

**1. AT THE SURGEON'S. 2. SLEEPLESS NIGHT.**



## LESSON 28

### Revision

#### Class Assignments.

1. *Read the text and translate it in a written form, using a dictionary.*

### ROOT CANAL FILLING

As the root canal must be sterilized before it is filled, all instruments and dressings must be sterile. A convenient arrangement is to keep a sealed container holding a complete sterilized root filling kit ready for immediate use at any time. Rubber dam is essential to prevent ingress of bacteria from the mouth into the root canal; and also to prevent accidents such as inhalation or swallowing of tiny root canal instruments.

Once the sterile instruments actually enter the infected root canal they are no longer sterile, and must be resterilized before being inserted again. Having made all these preparations, the procedure is as follows:

1. A local anaesthetic is given if the pulp is still vital.
2. Rubber dam is applied. The tooth and rubber dam are then swabbed with an antiseptic such as chlorhexidine.
3. Access to the pulp is gained by drilling open the pulp chamber.
4. The pulp is removed with a BARBED BROACH.
5. The root canal is enlarged with ROOT REAMERS. It is necessary to take an X-ray at this stage, with a root reamer in place, as a guide to correct preparation of the canal.
6. The walls of the root canal are smoothed and cleaned with ROOT CANAL FILES.
7. Debris is removed by irrigation with mild antiseptics such as sodium hypochlorite (Milton) and hydrogen peroxide.
8. The canal is then dried with absorbent PAPER POINTS.
9. A drug to sterilize the root canal is introduced on a paper point. Drugs used for this purpose vary according to individual preference, but probably the most effective is an ANTIBIOTIC paste capable of destroying all the organisms present. Other drugs used are TRICRESOL and BEECHWOOD CREOSOTE.
10. The pulp chamber is then sealed off with a temporary filling and the patient is dismissed.

11. At the second visit the canal should be sterile. If not, the above procedure is repeated as many times as necessary until it is sterile.

12. Once the root canal is sterile it is ready for filling, using the same sterile procedure as before. The paper point containing the sterilizing drug is removed with a barbed broach. The canal is washed with water and thoroughly dried with paper points.

13. The permanent root filling is now inserted. A GUTTA-PERCHA or SILVER POINT which fits the canal exactly up to the apex is selected. The canal is then filled with a sealer, using a spiral ROOT CANAL FILLER, and the point is inserted. Some operators prefer zinc phosphate cement or a RESORBABLE PASTE instead.

14. An X-ray is taken to check that the root filling completely fills the canal.

II. Find the names of the endodontic instruments in the right column and say for what stage they are used.

### Instruments

- |  |  |
|--|--|
| 1. Mirror, probe and tweezers.   | зеркало, зонд і пінцети                              |
| 2. Local anaesthetic equipment.  | наконечник і бори                                    |
| 3. Rubber dam equipment.   | пульпоекстрактори, римери, файли, каналонаповнювачі  |
| 4. Handpiece and burs.   | місцева анестезія                                    |
| 5. Barbed broaches, root reamers and files, spiral root canal fillers. | стерильні паперові голки та ватні валики             |
| 6. Sterile paper points and cotton wool.                               | гутаперчеві чи срібні штифти та цемент               |
| 7. Drug for sterilizing root canal.                                    | кофердам   |
| 8. Gutta-percha or silver points and cement.                           | медикаментозні засоби для стерильної обробки каналів |

III. Give the annotation of the text «Root Canal Filling».

## UNIT IV. PROSTHETICS. ORTHODONTICS

Словотворення: суфікси **-ly, -less**.

Граматика: Узгодження часів у складному реченні.  
Вживання теперішнього часу замість майбутнього у підрядних часу та умовних.



## LESSON 29

### Home Assignments

I. 1. *Pay attention to the translation of the predicate in the object clauses.*

He knew that	I studied at the Dental Academy   I had studied at the Dental Academy   I would study at the Dental Academy
--------------	---

Він знав, що	Я навчаюся в стоматологічній академії   Я навчався в стоматологічній академії   Я буду навчатися в стоматологічній академії
--------------	---

1. Чи збігаються за часом присудки англійського та українського головних речень? 2. Чи в одному часі перебувають присудки англійського та українського підрядного речення, якщо в реченні висловлюється: а) одночасність дії? б) дія, що передує дії головного речення? в) дія, котра має відбутися в майбутньому? 4. В чому полягає правило узгодження часу? (Див. грам. довід. стор. 509)

1) *Read and translate the sentences paying attention to the sequence tenses.*

1. The dentist said that he had examined the patient the day before. 2. The surgeon considered that the operation would be successful. 3. It was estimated that fluoridation influenced the rate of caries.

### 2. **Remember:**

| За допомогою суфікса **-ly** утворюються прислівники від прикметників: normal — нормальний; normally — нормально.

2) *Form adverbs from the following adjectives, translate them.*

full, present, partial, artificial, effective, efficient, certain, essential, possible.

II. 1. Translate and learn the following words.

arise	[əˈraɪz]	overrupt	[.ouvəˈrʌpt]
beneficial	[.beniˈfɪʃl]	partial	[ˈpaːʃiəl]
malnutrition	[.mælnjuːˈtriʃn]	tilt	[tɪlt]
missing	[ˈmɪsɪŋ]	trap	[træp]

Read and translate the following words and word combinations:

**denture** [ˈdentʃə] — full denture, partial denture, crown denture, implant denture, removable denture, trial denture.

**tilt** [tɪlt] — tilted, to tilt forward each other, to tilt to the left, a visual tilt.

**artificial** [ɑːtiˈfɪʃl] — artificially, artificial teeth, artificial replacement, artificial feeding.

III. Read and translate the text. Say to what conclusion you have come after having read the text.

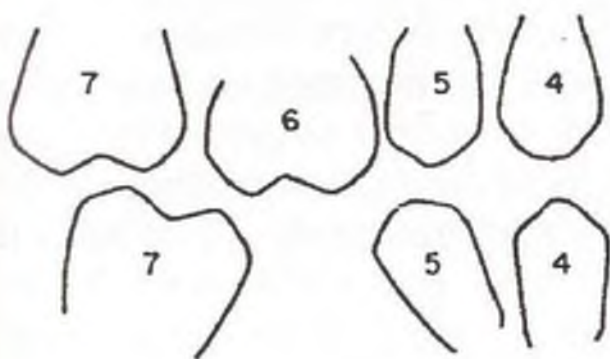
## PROSTHETICS

PROSTHETICS is the branch of dentistry concerned with the replacement of missing teeth by dentures, in order to restore normal appearance and function. When there are no teeth left in a jaw, it is said to be EDENTULOUS and the artificial replacement is called a FULL DENTURE; if some teeth are still present the replacement is called a PARTIAL DENTURE.

### Effects of Loss of Teeth

If a tooth is extracted, and not replaced artificially, the opposing tooth has nothing to bite on and is therefore functionless. Having no opposition, it overerupts and loses the beneficial cleansing effect of mastication. It consequently becomes a food

trap which produces localized gingivitis and caries. Furthermore the two teeth on either side of the missing one<sup>1</sup> tilt towards each other and form additional food traps. Thus the loss of a single tooth can give rise to caries and periodontal disease in at least three other teeth.





If several teeth are missing, mastication cannot be performed efficiently and this may lead to digestive disorders and even malnutrition. In addition the whole force of mastication is borne by the few remaining teeth; and if periodontal disease is already present it will certainly be aggravated by this excessive stress.

Therefore it is essential to replace missing teeth as soon as possible, with a denture or bridge, in order to prevent these dental and digestive disorders arising.

### A note

<sup>1</sup> ***the two teeth on either side of the missing one*** — два зуба-антагоніста, розташовані по обидва боки щодо відсутнього.

### Class Assignments

**V. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. ортопедія. 2. відсутні зуби. 3. протез. 4. беззубий. 5. суцільний протез. 6. частковий протез. 7. зуби-антагоністи. 8. нагромаджувач харчових залишків. 9. нахилилися. 10. спричиняти карієс. 11. призводити до. 12. порушення травлення. 13. посилена напруга. 14. для того, щоб.

**Exercise 2.** *Quote the sentences in which the following words and word combinations are used in the text.*

concerned with, artificial replacement, functionless, food trap, single tooth, malnutrition, to be aggravated, bridge.

**Exercise 3.** *Answer the questions:*

1. What is prosthetics? 2. How is the artificial replacement called if a jaw is edentulous? 3. What is partial denture? 4. What happens if an extracted tooth is not replaced artificially? 5. When does a tooth lose the beneficial cleansing effect of mastication? 6. Why do the two teeth on each side of the missing one form additional food trap? 7. What can the loss of a single tooth give rise to? 8. Why do missing teeth lead to digestive disorders? 9. By what will periodontal disease be aggravated? 10. Why is it essential to replace missing teeth?

**Exercise 4.** *Read and translate the following words, paying attention to the prefixes.*

malnutrition (bad feeding), malformation, malocclusion, hyperplasia (overdevelopment), hyperalgia, hypercementosis, hypoplasia (underdevelopment), hypodontia, hypogenesis, unusual, abnormal, discolouration.

**Exercise 5.** *Form nouns according to the model. Model: paedodontics — paedodontist*

dentistry, orthodontics, periodontics, prosthodontics, therapy, surgery, hygiene.

**Exercise 6.** *Find logical relation in the following pairs of words.*

the former — the latter, the first — the last, resection — replacement, on the one hand — on the other hand, functioning — functionless, malignant — benign.

**Exercise 7.** *Insert articles where necessary.*

1. Missing teeth are replaced by ... dentures to restore normal appearance and function of ... teeth. 2. ... artificial replacement of an edentulous is called ... full denture. 3. When some teeth are present ... replacement is called ... partial denture. 4. ... missing teeth can be replaced with ... bridge. 5. Periodontal disease will be aggravated by ... excessive stress of the teeth. 6. ... absence of several teeth may lead to digestive disorders. 7. ... loss of a single teeth can give rise to ... caries and ... periodontal disease.

**Exercise 8.** *Make up questions based on the text and answer them.*

**Exercise 9.** *Give a summary of the text.*

**Exercise 10.** *Translate into English.*

1. Відсутність лише переднього зуба може завдати багато непрємностей пацієнтові. 2. Протезування виконується з метою відновлення нормального зовнішнього вигляду та функціонування зуба. 3. Відсутність зубів призводить до порушення акту травлення. 4. Міцність зубного ряду по-



рушується при втраті хоч би одного зуба. 5. Зуби, котрі не мають антагоністів, порушують оклюзійну поверхню. 6. Накопичення харчових залишків між зубами, нахиленими один до одного спричинить захворювання пародонту та карієс. 7. Протезування є двох видів: часткове та суцільне, котре виконується у разі цілковитої втрати зубів. 8. Протезування необхідне для того, щоб не піддавати решту зубів додатковому навантаженню при жуванні.

**Exercise 11.** *Read the text and give the annotation of it.*

## **STAGES OF DENTURE CONSTRUCTION**

Dentures are made in a dental laboratory, on models of the jaws produced by pouring Plaster of Paris into an IMPRESSION of the patient's jaw. The impression is taken in an IMPRESSION TRAY which is filled with impression material and held in the mouth till set.

Having obtained models of each jaw, they must be mounted in the same relationship to each other as they are in the mouth; i.e. the upper and lower models are mounted in such a position that the distance between them, vertically and horizontally, is exactly the same as that between the jaws when the mouth is at rest. In order to achieve this, BITE BLOCKS are constructed in the laboratory. The bite block consists of A BASEPLATE and bite rim. A baseplate is a temporary plate made of acrylic, shellac or wax, whilst the bite rim is a composition or wax rim fixed on the baseplate in the same position as the teeth would be. In the surgery bite blocks are worn whilst the normal relationship of the jaws at rest is recorded. This stage is usually referred to as 'taking the bite'.

The models are then returned to the laboratory where they are mounted on an ARTICULATOR. This is essentially a hinged mechanism for keeping models in their correct relationship as obtained at the bite stage. It can open and close to reproduce some of the movements of the jaws. Once the models are mounted on an articulator the bite rims are removed from the baseplates, and the false teeth fixed on, with wax, in their place. The baseplates with teeth attached are then fitted in the surgery to see that they bite together correctly and are of satisfactory

appearance. This stage is called the TRY-IN. As the teeth are only embedded in wax, any alterations in arrangement or shade of the teeth can easily be made at this stage.

These 'waxed-up' dentures are now returned to the laboratory to be made into finished dentures, which are then fitted in the surgery.

## LESSON 30

### Home Assignments

I. *Read the sentences and answer the questions:*

The man you see here is my dentist.

1. Визначте у цьому реченні підмет та присудок. 2. Скільки тут речень? 3. Яка залежність між цими реченнями? 4. Чого не вистачає між реченнями? 5. Як ви перекладете все речення? Прочитайте та порівняйте такі речення:

а) I know my friend is not ill.

б) My friend you know well is not ill.

6. Визначте види підрядних речень в а) та б) і скажіть, як вони поєднані з головним? 7. Як перекладаються на українську мову безсполучникові підрядні речення? (Див. граматичний довідник, стор. 504)

1) *Define the type of the clauses and translate the sentences.*

1. We know well missing teeth should be replaced by denture.  
2. The nurse knew the patient would come in time. 3. I thought you were absent. 4. He prepared the material I had brought.  
5. It is not the way I am looking for.

II. *Translate and learn the words and word combinations.*

coat	[kəʊt]	plaster of Paris	[ˈplɑːstə]
facilitate	[fəˈsɪlɪteɪt]	powder	[ˈpaʊdə]
fit back	[fɪt]	retrieve	[rɪˈtriːv]
follow	[ˈfɒləʊ]	separating medium	[ˈmiːdiəm]
impression	[ɪmˈpreʃn]	wax	[wæks]
instruction	[ɪnˈstrʌkʃn]		
manufacture	[ˌmænjuˈfæktʃə]		

III. *Read the text and translate it.*



## IMPRESSION MATERIALS

The choice of impression material to be used depends on various factors, such as condition of the jaws and the presence or absence of teeth. Each type of material has a different method of preparation and use, and manufacturers' instructions must be carefully followed if a satisfactory impression is to be obtained. Impressions for full dentures are called edentulous impressions whilst those for partial dentures are known as partial impressions.

### *Plaster of Paris*<sup>1</sup>

Plaster of Paris is used for edentulous impressions. The powder is mixed gently with water in a rubber bowl, in the proportions recommended by the manufacturer. It takes a few minutes to set hard in the mouth and can usually be removed intact. If some fragments do break off they are retrieved and fitted back into the rest of the plaster impression. Tweezers and sticky wax are needed for this purpose. Before a model can be made, the impression must be coated with a SEPARATING MEDIUM to facilitate removal of the plaster impression from the model. Soap solution is commonly used as a separating medium.

The advantage of plaster is that it gives an accurate impression which can be left indefinitely before making the model.

The disadvantage is that it cannot *be removed in one piece*<sup>2</sup> from very *under-cut areas*<sup>3</sup> and is therefore unsuitable for partial impressions.

## Notes

<sup>1</sup> ***Plaster of Paris*** — гіпс.

<sup>2</sup> ***to be removed in one piece*** — видалити всуціль, не пошкодивши відбиток

<sup>3</sup> ***undercut areas*** — протезне ложе.

## Class Assignments

**IV. Exercise 1.** Find in the text English equivalents for these words and word combinations.

1. вибирання відбиткового матеріалу. 2. інструкція виробни-

ка. 3. гіпс. 4. замісити рівномірно. 5. затвердіти. 6. деякі фрагменти. 7. гумова чашка. 8. розмежувальне середовище. 9. точний відбиток. 10. виготовлення моделі.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

to be followed, edentulous impressions, to be removed, to be fit back, model, in one piece.

**Exercise 3.** *Form adjectives from the following verbs with the help of the affixable and translate them.*

to remove, to irritate, to prevent, to change, to suit, to response.

**Exercise 4.** *Answer these questions.*

1. What does the choice of impression material depend on?  
2. Why must manufactures' instructions be carefully followed?  
3. How are impressions called? 4. What material is used for edentulous impressions? 5. How is plaster of Paris mixed?  
6. How long does it take to set hard in the mouth? 7. What is done if some fragments break off? 8. When is the impression coated with a separating medium? 9. What solution is commonly used as a separating medium? 10. How can you characterize the advantages and disadvantages of plaster?

**Exercise 5.** *Insert prepositions where necessary.*

## IMPRESSIONS

### *Surgery Procedure*

The nurse sets out mirror, tweezers and impression trays, and has the impression material ready ... preparing and loading ... the tray. The patient is provided ... a bib and mouth-wash. ... impressions have been taken the nurse cleans ... any impression material from the patient's lips.

As the impression must reach the laboratory ... perfect condition the nurse must take great care to handle it correctly. It should be very carefully packed if it is sent away ... an outside laboratory.



**Exercise 6.** *Insert articles where necessary.*

Impression trays are of two kinds, ... edentulous and partial. Edentulous trays are used for taking impressions for full dentures and are semicircular in ... cross section. ... partial trays are used for impressions for partial dentures and have a box-shaped cross section to accommodate ... remaining teeth. For ... upper impressions both types of tray have ... palatal section; which is, of course, absent in lower trays.

Very often it is not possible to obtain ... accurate impression with ... stock tray. In such cases ... model obtained from the first impression is used to make ... SPECIAL TRAY. With this 'made to measure' individual tray ... perfectly accurate final impression can be taken. Special trays are usually made of ... shellac base-plate material but acrylic or metal are also used.

**Exercise 7.** *Make up questions based on the text and answer them.*

**Exercise 8.** *Give a summary of the text.*

**Exercise 9.** *Translate these sentences.*

1. Наявність чи відсутність зубів зумовлює вибирання відбиткового матеріалу. 2. Необхідно ретельно дотримуватися інструкції виробника, оскільки кожний тип матеріалу має різні властивості. 3. Гіпс — найуживаніший відбитковий матеріал. 4. Щоб гіпс швидше тверднув, його замішують з соляним розчином. 5. Під час замішування гіпса з водою відбувається поглинання води, і він швидко твердне. 6. Після замішування гіпс наливають в ложку і вводять до ротової порожнини. 7. Перевага гіпса в тому, що він дуже дешевий і дає точний відбиток. 8. Проте гіпс непридатний для знімання часткових відбитків.

**Exercise 10.** *Read the text, translate it using a dictionary. Say what you have learnt about the advantage and disadvantage of composition.*

## COMPOSITION

Composition is obtained in solid slabs which are softened in hot water and loaded into the impression tray. In the mouth it sets

hard rapidly on cooling and can then be removed. The surface of the softened composition is lubricated with petroleum jelly before insertion; and chilled with cold running water on removal. To avoid any adverse effect on composition, the temperature of water used for softening it must not exceed that stated by the manufacturer. It varies from 55 — 70°C according to the particular brand, and should be checked with a thermometer.

Composition is used mainly for first impressions for special trays. It is also used extensively in a specialised impression technique for difficult edentulous cases; where the alveolar ridges would otherwise be too flat or flabby to provide a good fit for full dentures. An acrylic special tray is used and the technique is time-consuming and precise; the periphery of the impression is built up bit by bit, repeatedly adding composition to it and retrying in the mouth until it forms a perfect peripheral seal with the soft tissues.

The advantage of composition is this ability to provide the best possible retention for a full denture by means of a perfect peripheral seal. When perfect accuracy is not essential, as in first impressions for special trays, composition has the advantages of requiring no mixing, and being so easy and quick to prepare and use.

The disadvantage of composition is that it cannot be withdrawn from under-cut areas without distortion. Consequently it is unsuitable for final partial impressions.

## LESSON 31

### Home Assignment

I. *Pay attention to the translation of the verb-predicates in the subordinate clauses. Answer the questions.*

1. **If** you **come** to me we shall study filling materials.

1. Якщо ти прийдеш до мене, то ми будемо вивчати стоматологічні пломбувальні матеріали.

2. **As soon as** the patient **comes** to the clinic a dentist will examine him.

2. Щойно пацієнт прийде, стоматолог обстежить його.



3. **Before** the tooth **is extracted** the dentist will give an injection to relieve the pain. 3. Перед тим, як видаляти зуб, стоматолог обов'язково має зробити знеболювальну ін'єкцію.

1. Визначте види підрядних речень. 2. Визначте час дієслова-присудка у а) головних; б) підрядних реченнях. 3. У якому часі стоїть дієслово-присудок у відповідних українських а) підрядних; б) головних реченнях? 4. Якого ви дійшли висновку, порівнявши українські та англійські речення? (Див. граматичний довідник, стор. 505)

1) *Translate the sentences.*

1. If special care is not taken the impression will break off. 2. As soon as the alginate impression is removed, the model will be made immediately. 3. Before the impression is sent to the laboratory, the dentist will check its accuracy.

II. *Translate and learn the following words.*

withdraw	[wið' drɔ:]	shrink	[ʃrink]
distortion	[dis' tɔ:ʃn]	adhere	[əd' hiə]
shake	[ʃeik]	smear	[smiə]
vigorously	[ 'vigərəsli]	dimensional	[di' menʃənl]
immerse	[i 'mæ:s]	expand	[ik 'spænd]

III. *Read the text, translate it and say why alginate is the material of choice for partial impressions.*

## ALGINATE

Alginate impression materials are elastic and are therefore used mainly for partial impressions. They give an accurate impression which can be withdrawn from undercut areas without distortion or fracture.

Alginate impressions are prepared by mixing the powder and water with a spatula in a rubber bowl. The tin is shaken before opening *to loosen the powder*<sup>1</sup> and the water should be at room temperature to give correct setting time. Correct measures of powder and water are mixed vigorously to a smooth consistency. This sets in a few minutes in the mouth, and on withdrawal must

be wrapped in a wet napkin or immersed in liquid paraffin until the model is made.

*The advantage of alginate is its elasticity, which makes it the material of choice for partial impressions; and also allows more than one model to be made from the same impression.*

*Disadvantages of alginate are:*

1. If special care is not taken, alginate undergoes dimensional changes which would produce an inaccurate model. It may either absorb water and expand, or lose water and shrink. To prevent this happening the model must be made immediately. If this is not possible the dimensional changes can be avoided by wrapping the impression in a wet napkin and sealing it in a plastic bag; or by keeping it immersed in liquid paraffin. If an alginate impression must be sent away to an outside laboratory, the most convenient method is to wrap it carefully in wet napkins and seal it in an airtight plastic bag.

2. Alginate does not adhere to an ordinary tray so a perforated tray<sup>2</sup> is preferable. An ordinary tray will do, however, if it is first smeared with sticky wax or a special adhesive on the inside.

## Notes

<sup>1</sup> *to loosen the powder* — розпушити порошок

<sup>2</sup> *a perforated tray* — спеціальна ложка з виступами

## Class Assignments

**IV. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. переважно для. 2. точний відбиток. 3. ретельно. 4. однорідна маса. 5. базовий матеріал для часткового відбитка. 6. з одного й того ж відбитка. 7. зазнавати необоротних змін. 8. модель має відливатися відразу ж. 9. найзручніший метод. 10. не прилипати. 11. звичайна ложка. 12. всередині.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

to be withdrawn, by mixing, correct setting time, smooth consistency, the same impression, dimensional change, alginate impression, special adhesive.



**Exercise 3.** *Give the three forms of the following verbs and translate them.*

to give, to withdraw, to shake, to set, to make, to take, to lose, to keep.

**Exercise 4.** *Answer the questions.*

1. What impressions are alginate materials used for? 2. How can alginate impressions be withdrawn from undercut areas? 3. What method are alginate impressions prepared by? 4. Can you describe the procedure of mixing? 5. What is the advantage of alginate? 6. What do you know about its disadvantages? 7. Why do dimensional changes take place? 8. What must be done to avoid this? 9. Why can't an ordinary tray be used?

**Exercise 5.** *Insert missing words given below.*

1. Alginate ... materials are mainly used for accurate partial impressions. 2. Alginate impressions can be withdrawn from undercut areas without ... 3. It is necessary to mix the components vigorously to a ... consistency. 4. Alginate impressions allow more than one model to be made from the ... impression. 5. Alginate can ... water and expand or ... water and shrink, that's why the model must be made ... 6. An ordinary tray can be used if it is smeared with a special ... on the inside.  
(adhesive, lose, same, immediately, absorb, smooth, impression, fractures)

**Exercise 6.** *Make up 10 questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Методика користування альгінатною масою така: порошок змішують з водою кімнатної температури до утворення однорідної консистенції. 2. Матеріал відрізняється великою еластичністю, завдяки чому одержують точний відбиток тканин протезного ложе. 3. В альгінатних матеріалів суттєвим недоліком є те, що модель має відливатися відразу ж після видалення відбитка з ротової порожнини. 4. Для того, щоб

відбиток під час видалення з ротової порожнини вийшов разом з ложкою, останню зсередини треба змастити спеціальним адгезивом. 5. Якщо відбиток не загорнути у вологу серветку, то він пересохне.

**Exercise 9.** *Read the text, translate it using a dictionary and say where impression pastes are used.*

## IMPRESSION PASTE

Impression pastes are a modified form of zinc oxide and eugenol cement. Various other constituents are added to make it suitable as an impression material. It is supplied in two tubes: one containing the white zinc oxide mixture; the other containing the red eugenol mixture. Equal lengths from each tube are mixed together with a spatula on a slab; to give a uniform pink mix without any red or white streaks.

It is used as a thin lining for final composition impressions, or alone in tight-fitting special trays, to provide an accurate edentulous impression. It is also used as a lining to improve the fit of baseplates in the bite or try-in stages. Another important use of impression paste is for relining loose dentures. The loose denture is used as an impression tray for the paste and is then sent to the laboratory for the new fitting surface to be processed in acrylic.

The advantage of impression paste is the improved fit which can be obtained by its use as a thin lining to composition impressions, baseplates or dentures. Furthermore, its accuracy can be checked or improved by reinsertion in the mouth and adding fresh paste where necessary.

A disadvantage is that it cannot reproduce undercuts and is therefore unsuitable for partial impressions. It also tends to stick to the lips and surrounding skin, but this can be avoided by smearing them beforehand with petroleum jelly.



## LESSON 32

### Home Assignments

#### I. Remember:

За допомогою суфікса **-less** від іменників утворюються прикметники без зазначення якої-небудь якості або відсутність: use — користь; useless — некорисний.

1) Read and translate.

painless, colourless, helpless, functionless, shapeless, waterless.

#### II. Translate the words and learn them.

bite block	[bait]	entail	[in' teil]
baseplate	[ˈ beispleit]	protrusive	[prə ˈ truːsiv]
trim	[trim]	thrust	[θrʌst]
rim	[rim]	shade	[ʃeid]
groove	[gruːv]	bow	[bou]
squeeze	[skwiːz]	relationship	[ri ˈ leiʃnʃɪp]

#### III. Read the text, translate it and say how you can name the method using bite blocks.

### THE BITE STAGE<sup>1</sup>

The nurse sets out models, bite blocks, sheets of wax, wax knife and a *shade guide*<sup>2</sup>. The patient is provided with a bib and mouth-wash.

The baseplates are fitted and trimmed if necessary to make them comfortable. The bite rims are reduced or increased in height until the jaws are the correct distance apart when the bite blocks are in contact. Grooves are cut in the rims and a softened layer of wax is then bitten between them. This squeezes wax into the grooves and permanently records the correct relationship of *the jaws at rest*<sup>3</sup>. Marks are also made on the upper bite rim to indicate the midline of the face and rest position of the upper lip.

Best results are obtained if dentures are made on an ANATOMICAL ARTICULATOR although this entails extra surgery time at the bite stage, and in the laboratory. The extra steps required when such an articulator is used are for *indicating the movements*<sup>4</sup> of the jaws during mastication; and consist of *the face bow*<sup>5</sup> and protru-

sive bite registrations. A face bow is an accessory part of the articulator for recording the position of the upper bite block relative to the mandibular condyles. The protrusive bite is taken by the patient thrusting his jaw forward and biting on to another layer of wax between the bite blocks. The classical method mentioned above has its disadvantages in defining central occlusion. That is why the creative thought of dentists has been searching some new, more perfect ones.

Finally the shade of artificial teeth to be used in the finished dentures is selected from a shade guide.

## Notes

- 1 **the bite stage** — етап визначення центральної оклюзії
- 2 **a shade guide** — шкала відтінків
- 3 **the jaws at rest** — стан відносного спокою щелеп
- 4 **indicating the movements** — запис рухів
- 5 **the face bow** — рамка обличчя

## Class Assignments

**IV. Exercise 1.** Find in the text English equivalents for the following words and word combinations.

1. прикусний валик. 2. шкала відтінків. 3. індивідуальна відбиткова ложка. 4. наростити краї. 5. зробити надрізи. 6. визначити середню лінію обличчя. 7. анатомічний артикулятор. 8. додатковий час роботи з пацієнтом та в лабораторії. 9. рамка обличчя. 10. протрузивний прикус. 11. суглобовий бугорок.

**Exercise 2.** Quote the sentences in which these words and word combinations are used in the text.

bite block, softened layer of wax, midline, entail, registration, accessory part, finished denture.

**Exercise 3.** Find in the text derivatives of the following words.

comfort, soft, permanent, anatomy, to articulate, to move, to masticate, to register, to relate, final.

**Exercise 4.** Answer the questions.

1. Why are the baseplates fitted and trimmed? 2. When are bite rims corrected? 3. How can the correct relationship of the jaws



at rest be recorded? 4. What other marks are made? 5. Why does an anatomical articulator entail extra surgery and laboratory time? 6. What is a face bow? 7. How is the protrusive bite taken? 8. What is the final step at the bite stage?

**Exercise 5.** *Insert articles where necessary.*

1. There are some stages in ... denture production: ... impression taking stage, ... bite stage, ... try-in stage and ... fitting stage. 2. ... impressions taken for denture production can be anatomical and functional. 3. ... tray must be specially prepared to make it comfortable. 4. Having received ... bite blocks from the laboratory ... dentist checks up ... accuracy of their production. 5. ... dentures are tried in the patient's mouth. 6. Each denture is checked to ... retention, stability, occlusion and appearance.

**Exercise 6.** *Make up 6 questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Відбиткові валики припасовуються, їх краї зменшуються, якщо в цьому є потреба. 2. Коли валики перебувають у положенні контакту, наноситься ще один шар розм'якшеного воску. 3. По верхньому краю ставиться відмітка для позначення середньої лінії обличчя. 4. Часто протези виготовляються із застосуванням анатомічного артикулятора. 5. Використання його потребує додаткового часу, проте результати виявляються кращими. 6. Лікар повинен підібрати такий відтінок штучних зубів, який цілком відповідав би природному кольору. 7. Приміряючи протез, лікар повинен упевнитися, що пацієнт не відчуває дискомфорту.

**Exercise 9.** *Read the text, translate it and give the annotation of the text.*

## **THE TRY-IN STAGE**

The nurse sets out models, waxed-up dentures and a large hand mirror.

The waxed-up dentures are tried in the patient's mouth and

checked for comfort, stability and occlusion. The patient is given a mirror to see the shade, shape and arrangement of the teeth; and if dissatisfied with them, any necessary adjustments can then be made in the surgery. It is emphasized to the patient that such adjustments can only be done at this stage whilst the teeth are still embedded in wax; alterations cannot be carried out once the dentures are finished.

### FITTING STAGE

The finished dentures are kept in a bowl of water until insertion. Articulating paper and a large hand mirror are set out.

Each denture is fitted in turn to check its retention and stability. Any necessary adjustments to the occlusion are made by biting on a piece of ARTICULATING PAPER. This marks the high spots on the teeth which can then be ground down with a carborundum stone in a handpiece.

The patient is given a mirror to see the appearance of the new dentures and is shown how to insert and remove them. Instructions are given, as follows, on the care of dentures:

1. They must be cleaned after meals with a scrubbing brush, soap and cold water.
2. Hot water should not be used as it may damage the plastic.
3. Partial dentures must not be worn at night.
4. At night, or any other time when the dentures are not worn, they must be kept in a glass of water. If allowed to dry out, plastic is liable to warp and may not fit properly.

An appointment is given for a few days later to see how the patient is managing the new dentures. Any difficulties or soreness can then be remedied.

## LESSON 33

### Home Assignments

I. *Translate the words and learn them.*

correction	[kə 'rekʃn]	accommodate	[ə 'kɒmədeɪt]
irregularity	[ɪregjʊ 'læritɪ]	gap	[gæp]
crook	[kru:k]	drift	[drɪft]
obtain	[əb 'teɪn]	posture	[ 'pɒstʃə]



eliminate	[i'limineit]	chin	[tʃin]
crowd	[kraud]	inheritance	[in'heritəns]
room	[ru:m]		

II. Read and translate the text, compose the plan of it.

## ORTHODONTICS

Orthodontics is the branch of dentistry concerned with correction of irregularities of the teeth. When the permanent teeth erupt, parents may notice that the front teeth are *crooked*<sup>1</sup> or protruding. The condition is known as a MALOCCLUSION and treatment is sought to improve the child's appearance.

The aims of orthodontic treatment are to reposition the teeth so that appearance is improved and a good functional occlusion obtained. By correcting badly positioned teeth it may also eliminate some stagnation areas and help prevent caries and periodontal disease developing.

The basic types of malocclusion are *crowding*<sup>2</sup>, protruding upper incisors and a prominent lower jaw.

Crowding is due to insufficient room for all the teeth. It usually arises from inheritance of jaws which are too small to accommodate thirty-two permanent teeth. The teeth become crooked and overlapping, whilst those which normally erupt late cannot take up their proper position *as there is insufficient room left*<sup>3</sup>. Thus the canines are usually displaced buccally, second premolars lingually and the lower third molars are impacted.

Early extraction of carious deciduous molars may also contribute to the crowding in these cases. The gap left by the extraction soon closes, as the back tooth drifts forward and takes up the space required for the permanent successor.

Many children attend for orthodontic treatment because their upper front teeth protrude between their lips. This condition usually arises from inheriting a jaw relationship in which the upper teeth are too far forward relative to the lowers. It is commonly associated with an open lip posture.

Prominent lower jaw is the condition, in which the chin is unduly prominent, is due to inheritance of a jaw relationship in which the lower teeth are too far forward relative to the uppers.

It usually results in the lower incisors biting in front of the uppers, instead of behind them.

## Notes

1 **crooked** — повернений

2 **crowding** — скупченість (зубів)

3 **as there is insufficient room left** — оскільки не залишилося вдосталь місця

## Class Assignments

**III. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. ортодонція. 2. виправлення аномалій зубів. 3. котрі виступають. 4. неправильний прикус. 5. усунути аномалії положення зубів. 6. зсув нижньої щелепи. 7. щоб дати місце 32-м зубам. 8. раннє видалення. 9. звертатися за ортодонтичним лікуванням. 10. відкритий прикус.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

concerned with, child's appearance, to reposition, prominent lower jaw, too small, overlapping, to contribute to, gap, inheriting, unduly, instead of.

**Exercise 3.** *Translate the words in brackets.*

1. Orthodontics is concerned with (виправлення) of irregularities of the teeth. 2. When the front teeth are (розвернені) or protruding the treatment is sought to improve the child's appearance. 3. The aim of such treatment is to improve appearance and to obtain a good (функціональну) occlusion. 4. This will help prevent caries and periodontal disease (розвиток). 5. (Простір) left by the extraction soon closes.

**Exercise 4.** *Answer the questions.*



1. What is orthodontics concerned with? 2. When are permanent teeth crooked or protruding? 3. What condition is known as malocclusion? 4. What are the aims of orthodontic treatment? 5. What basic types of malocclusion do you know? 6. When does crowding arise? 7. What happens if there is insufficient room left? 8. How are the teeth usually displaced in these cases? 9. What may early extraction also contribute to? 10. Why do many children attend for orthodontic treatment? 11. What condition is commonly associated with an open lip posture? 12. What does prominent lower jaw result in?

**Exercise 5.** *Put the following sentences in logical order.*

1. Malocclusion is an antonym to occlusion.
2. Orthodontics is the science which deals with the correction of malocclusion of the teeth.
3. The aims of orthodontics are to reposition the teeth in order to improve appearance and obtain a normal functional occlusion.
4. Malocclusion should be studied only from the basis of the normal position of the teeth.
5. Occlusion is the normal relations of the occlusal inclined planes of the teeth when the jaws are closed.
6. The basic types of malocclusion are crowding, protruding upper incisors and a prominent lower jaw.

**Exercise 6.** *Insert articles where necessary.*

Occlusion is ... basis of the science of orthodontia. Occlusion is ... normal relations of ... occlusal inclined planes of the teeth when ... jaws are closed. The shapes of ... cusps, crowns and roots, and even ... very structural material of the teeth and their attachment are all designed for the purpose of making occlusion the one grand object. So ... teeth may serve ... chief purpose for which they are intended, namely, the cutting and grinding of food.

**Exercise 7.** *Insert prepositions where necessary.*

A case of deep overbite presents many problems and it is the concern ... the orthodontist, the prosthodontist, and the peri-

odontist. The mood of therapy depends largely ... the approach to the problem and the age ... the patient. Deep overbite ... destructive lesions of periodontium is difficult to treat. A simple orthodontic procedure to check and ... many cases to control the deep overbite condition is the bite plate. This is a removable appliance which is made ... acrylic and covers the palatal surface of the maxilla.

**Exercise 8.** *Pay attention to the meaning of the prefix **over-** in the following words.*

overbite, to overcome, to overbuild, to overcrowd, overdose, to overfeed, overpressure, to oversleep.

**Exercise 9.** *Make questions based on the text and answer them.*

**Exercise 10.** *Give a summary of the text.*

**Exercise 11.** *Translate into English.*

1. Є різні аномалії положення зубів. 2. Наука, котра займається виправленням неправильного прикусу, називається ортодонтією. 3. Головні види неправильної оклюзії: скупченість зубів, прогнатія, прогенія, глибокий та відкритий прикус. 4. Невідповідність між щелепою та шириною зубів призводить до такого явища, як скупченість. 5. Прикуси з порушеними функціями належать до патологічних. 6. Дуже часто порушення прикусу пов'язане з успадкуванням. 7. Шкідливі звички у дитинстві посідають чільне місце в аномалії прикусу.

**Exercise 12.** *Read the text and give annotation of it.*

## **CAUSES OF MALOCCLUSION**

Almost all kinds of malocclusion are genetic in origin; very few are acquired. Causes of malocclusion include abnormal jaw relationship, crowding, supernumerary teeth, missing teeth and sucking habits.

Normal jaw relationship is known as a CLASS 1 occlusion. The abnormal relationships are protruding upper incisors (class 2 occlusion) in which the upper jaw is too far forward; and a promi-



nent lower jaw (class 3 occlusion) in which the lower jaw is too far forward.

As already mentioned this occurs when the jaws are too small to accommodate all the teeth. Unfortunately it often occurs where there is already an abnormal jaw relationship, thus producing an even worse malocclusion.

A supernumerary tooth is an extra one, in addition to the normal complement of thirty-two teeth. It occurs most commonly in the upper incisor region and may either prevent the central incisor erupting or cause it to erupt in an abnormal position.

Missing teeth is the opposite condition to supernumerary teeth. Upper lateral incisors are often missing and orthodontic treatment may be necessary to close the resultant gaps. Sometimes, instead of being absent, upper lateral incisors are tiny conical teeth. Again the appearance is unsightly and treatment may be necessary.

Habits such as finger or thumb sucking can cause a temporary displacement of front teeth. This is usually corrected quite easily when the habit ceases.

## LESSON 34

### Home Assignments

- Conversations:**
- A. AT THE PROSTHETIST'S.**
  - B. GIVING INSTRUCTIONS.**
  - C. AT THE ORTHODONTIST'S.**

I. *Learn these patterns.*

- |  |  |
|--|--|
| 1. <i>I like it when it is comfortable.</i>        | Мені до вподоби, коли зручно.                  |
| <i>I don't like it when some teeth are missing</i> | Мені не подобається, коли немає кількох зубів. |

**Exercise 1.** *Make up sentences using the table and translate them.*

I	like	don't like	hate	it	when everything is done in
They					time. when they hear the
We					sound of drilling.
					when you are late.
He	likes	doesn't like			when it is good looking.
She					when he misses the lessons.

2.

- «I like it when you work hard.» — Мені до вподоби, коли ти заповзято працюєш.  
«**So** do I.» — Мені також.  
« I don't like it when you are late.» — Мені не до вподоби, коли ти запізнюєшся.  
«**Neither** do I.» — Мені також.

**Exercise 2.** Give responses according to the model.

**Peter helped me yesterday. (John)**  
**So did John.**

1. We finished the work in time. (I). 2. I was doing my homework at that time. (They). 3. She doesn't speak French. (We). 4. He can't write Spanish. (I). 5. They did the job in time. (My dentist) 6. I haven't prepared the impression yet. (He).

**Exercise 3.** Make up four sentences using pattern 2.

**II.** Translate and learn these words and word combinations.

porcelain jacket crown	[ ' pɔ:səlin]	wrap	[ræp]
ceramics	[si ' ræmiks]	remedy	[ ' remidi]
saw	[sɔ:]	removable	[ri ' mu:vəbl]
fragile	[ ' frædʒail]	appliance	[ə ' plaiəns]
stress bearing	[ ' biəriŋ]	spring	[ ' sprɪŋ]
habit	[ ' hæbit]	stainless	[steinləs]
wear	[wɛə]	steel	[sti:l]
dry out	[drai]	wire	[waɪə]

**III.** Read and translate the dialogues.

### **A. AT THE PROSTHETIST'S**

**Patient:** Good morning, doctor.

**Dentist:** Good morning. Sit down here, please. What's the trouble?



- I have some teeth missing and some are not good looking. I don't like it when there are some missing teeth. What would you advise me?
- Open your mouth wider, please. I'll examine your teeth. Oh, yes, you really need to place some crowns and a bridge. You haven't one tooth of the upper jaw and the neighbouring premolar is bad, it is cracked. Both incisors are dead. I'd recommend you to place the porcelain jacket crowns on the front teeth and a ceramic bridge on other teeth.
- Will it hurt much doctor?
- Of course it will be unpleasant. First I'll take plaster impression of your dentition, then I must saw these teeth before crowning them.
- But, doctor, porcelain is such a fragile material.
- Oh, you needn't worry. We'll use metalloceramics for *occlusal stress bearing restorations*<sup>1</sup>. And then, you must be careful in your eating habits.

## B. GIVING INSTRUCTIONS

*Patient:* Good afternoon, doctor.

*Dentist:* Good afternoon, Mr. Petrenko. It's nice to see you again. Your denture is ready and we'll check it for comfort and occlusion. How do you feel it now?

- I like it now when it is comfortable and good looking.
- So do I. Have a look at the appearance of the new denture. Take the mirror. Can you insert and remove it.
- Yes, doctor, thank you.
- Then I'd like to give you *instructions on the care of your denture*<sup>2</sup>. First you must clean it after meals with a brush, soap and cold water. Hot water should not be used as it may damage the plastic.
- And what about the night time?
- At night or any other time when the denture is not worn, it must be kept in a glass of water. *If allowed to dry out*<sup>3</sup>, plastic is liable to warp and may not fit properly.
- Thank you, doctor. I'll follow your advice.
- Come to me in a few days to see how you manage the

new denture. Any difficulties will be remedied.

### C. AT THE ORTHODONTIST'S

(A mother and her child have come to the dentist for help).

- Good morning, doctor.
- Good morning. Sit down here, please. What can I do for you?
- You see, doctor when these permanent teeth have erupted I notice that the front teeth are protruding. I'd like to have your advise how to improve the child's appearance.
- It is nice of you to come in time. It is possible not only to improve the appearance but to obtain a good functional occlusion as well. We'll correct these badly positioned teeth with the help of a *removable appliance*.<sup>4</sup>
- Will it be very difficult for the child, doctor?
- Oh, no, but it may produce discomfort at first. It contains springs made of tainless steel wire. The springs press against the teeth to be moved and *guide them in the required direction* <sup>5</sup>.
- Will it take long?
- Not very, because it isn't far gone and in some time you will forget about your fears.

#### Notes

<sup>1</sup> ***occlusal stress bearing restorations*** — реставрації з екстремальним жувальним навантаженням

<sup>2</sup> ***instructions on the care of your denture*** — інструкції по догляду за вашим протезом

<sup>3</sup> ***if allowed to dry out*** — якщо дозволити протезу пересохнути

<sup>4</sup> ***removable appliance*** — знімний ортодонтичний апарат

<sup>5</sup> ***guide them in the required direction*** — розвертають їх (зуби) у потрібному напрямку



## Class Assignments

**IV. Exercise 1.** Find in the dialogues English equivalents for the following words and word combinations.

1. порцелянова жакетна коронка. 2. підпиляти. 3. крихкий матеріал. 4. бути обережним. 5. перевірити чи зручний він (протез). 6. одягати та знімати. 7. пошкодити пластмасу. 8. не бути як слід припасованим. 9. чи справляєтесь ви з протезом? 10. усунути. 11. прийти вчасно. 12. бути незручним. 13. неіржавіюча сталева провіолока.

**Exercise 2.** Quote the sentences in which these words and word combinations are used in the dialogues.

missing teeth, need, to be cracked, to place, to saw, fragile material, eating habits, to check for, to insert, to give instructions on, damage, to dry out, to follow, to improve, to correct, to produce discomfort, to be moved.

**Exercise 3.** Make the necessary substitutions and reproduce the dialogues.

1. — I have some teeth missing. What would you advise me, doctor.

— I'd recommend you to place **the porcelain jacket crown on the front teeth.**

(a metalloceramic bridge, gold crowns on those molars and metalloceramic restorations for occlusal stress bearing teeth).

2. — I'd like to give you some instructions on the care of **your denture.** First you must clean it after meals.

— Is it a fragile material?

— No, but be careful not to damage it or it may not fit properly.

(your removable appliances, your full denture).

3. — I can't **manage** the new denture. It doesn't fit properly.

— Let me help you. You must follow my advise.

(insert, remove, wear).

**Exercise 4.** *Point out in the dialogue the sentences with **should** and **would** and define their functions. (Див. грам. довід. стор. 495)*

**Exercise 5.** *Fill in the missing remarks. Reproduce the dialogues.*

1. — Good morning, doctor.

— ...

— I have some teeth missing. What would you advise me?

— ...

2. — Will it hurt much, doctor?

— ...

— But porcelain is such a fragile material.

— ...

3. — Is my denture ready, doctor?

— ...

— Let me have a look at the appearance.

— ...

— Yes, doctor, thank you.

4. — I'd like to give you some instructions on the care of your denture. Clean it after each meal and keep it in water when you don't wear it.

— ...

5. — What can I do for you?

— ...

— It's nice of you to come in time. We'll correct these badly positioned teeth with the help of a removable appliance.

— ...

— Oh no, but it may produce discomfort first.

**Exercise 6.** *Translate into English.*

1. — Добридень, лікарю.

— Доброго дня, сідайте, будь ласка. Що сталося?

— Я зламав зуб, і мені тепер не подобається мій вигляд.

— Давайте оглянемо. Так, сюди можна поставити порцелянову жакетну коронку. Я зроблю відбиток, і через день поміряємо коронку.

2. — У мене немає кілька зубів і мені погано жувати.

— Так, на нижній щелепі немає трьох молярів. Треба зробити міст. Але не хвилюйтеся. Все буде добре

— А який матеріал ви б порадили, лікарю?



- Для реставрацій з екстремальним жувальним навантаженням ми використовуємо металокераміку.
- 3. — Добрий день, лікарю.
- Добрий день, пане Петренку. Радий Вас бачити. Ваш протез готовий. Давайте поміряємо. Вам зручно?
- Так, мені до вподоби, що протез такий зручний і має гарний вигляд.
- Мені також. Але за ним треба доглядати.
- Я повинен знімати його на ніч?
- Так, і зберігати у склянці з водою. Ще треба обов'язково чистити його після вживання їжі.
- Гаразд, я дотримуватимуся ваших порад.
- 4. — Лікарю, у моєї дитини виникли проблеми після прорізування постійних зубів. Ви бачите, верхні зуби виступають вперед. Чи можна це виправити?
- Так, звичайно. Ви правильно вчинили, що прийшли.
- Це боляче?
- Трішки незручно спочатку, проте незабаром ви забудете про ваші страхи. Ми поставимо ортодонтичний апарат, і зуби вирівнюються. Все буде добре.

**Exercise 7.** *Make up dialogues based on these situations.*

1. **AT THE PROSTHETIST'S.**
2. **YOU MUST FOLLOW MY INSTRUCTIONS.**
3. **IMPROVING THE CHILD'S APPEARANCE.**

## **LESSON 35**

### **REVISION**

#### **Class Assignments**

- I. *Read the text and translate it in a written form, using a dictionary.*

### **DENTURE MATERIALS**

Full dentures are made of acrylic, with porcelain or acrylic teeth. Sometimes the palate of a full denture is made of metal if there is a heavy bite. Metals used are stainless steel, chrome-

cobalt or gold.

There are two types of partial denture. One is made entirely of acrylic; whilst the other consists of a metal skeleton with the artificial teeth embedded in acrylic.

Acrylic partial dentures may have wire clips to improve retention. These clips, which are known as CLASPS, are made of stainless steel, gold or chrome-cobalt.

SKELETON DENTURES are made of chrome-cobalt or gold castings. They are much better dentures as the metal skeleton is far stronger than plastic. This allows construction of a less bulky denture, specially designed to prevent food traps round the gums and teeth. The remaining teeth are used for support and retention of the skeleton. Clasps are used for retention and OCCLUSAL RESTS for support. Occlusal rests are tiny lugs which fit on the occlusal surface of the enamel or in a groove cut into a filling. Skeleton dentures take longer to make and are for more expensive than plastic ones. Special tray impressions are necessary to ensure accuracy as it is difficult to make adjustments to metal castings. Extra visits may also be required to cut seats for occlusal rests in existing fillings, and to try in the metal skeleton before waxing-up the teeth.

II. Characterize each impression material using the table given below.

IMPRESSION MATERIAL	USES	ADVANTAGES	DISADVANTAGES
Plaster	Edentulous impressions	Accuracy. No dimensional changes	Unsuitable for partial impressions
Composition	Impressions for special trays	Rapid and simple No mixing required	Unsuitable for final partial impressions
	Edentulous impressions with perfect peripheral seal	Best possible retention	Takes longer than any other impression
Alginate	Partial impressions	Accuracy	Dimensional changes
Impression paste	Lining composition impressions and baseplates Relining dentures	Accuracy  Can be tried in mouth and additions made	Unsuitable for partial impressions  Sticks to lips and skin



### III. *Answer the questions.*

1. What is prosthetics? 2. Why is it essential to replace missing teeth? 3. What are stages of denture construction? 4. What impression materials do you know? 5. What is the surgery procedure of the bite stage? 6. What does the try-in stage include? 7. How is each denture fitted? 8. What are the aims of orthodontic treatment?

### IV. *Read the text, translate it. Give the annotation of the text.*

## **TREATMENT OF MALOCCLUSION**

Orthodontic treatment may involve extractions and the use of removable or fixed appliances.

When the jaw is too small to accommodate all the teeth properly, they often become crowded and irregular. Such malocclusions are treated by extractions. The commonest teeth to be extracted for this purpose are first premolars and the resultant space provides room for straightening the crooked teeth. An appliance may then be required to reposition the teeth in good alignment.

A removable appliance resembles an acrylic partial denture but instead of teeth it contains springs made of stainless steel wire. The springs press against the teeth to be moved and guide them in the required direction. The appliance is held in place by stainless steel clasps.

Fixed appliances consist of bands made of stainless steel tape which are cemented on to certain teeth. Various types of wire springs and elastics are attached to the bands to produce the desired tooth movements.

Most orthodontic appliances contain delicate wire springs, designed to fit precisely against the teeth to be moved. Patients and parents are accordingly advised to take the greatest care of their appliances.

Removable appliances must only be removed and inserted as directed by the dentist. Careless handling may distort the springs and produce discomfort or undesirable tooth movements. They

should be removed and cleaned with brush, soap and cold water after meals; and patients are warned that failure to do this will result in rapid caries.

Fixed appliances are less robust than removable ones and even greater care must be taken over oral hygiene.

Whichever type of appliance is used, patients are instructed to contact the surgery at once if any difficulties arise.

## Unit V. ORAL HYGIENE. PREVENTIVE DENTISTRY

Граматика: Умовний спосіб

### LESSON 36

#### Home Assignments

I. Read the sentences. Pay attention to the italicized words and their translation. Answer the questions and do the tasks.

a) If he *were* here he *would* help us. (tomorrow, today)

*Were* he not ill he *would* help us (tomorrow, today)

If he *hadn't been* ill he *would have helped* us yesterday.

Якби він був зараз тут, то допоміг би нам.

Якби він не був хворим, то допоміг би нам.

Якби він не був хворим, то допоміг би нам учора.

b) It is necessary that he *should* examine the patient.

It is desirable that you *be* at the clinic at 2 o'clock.

It is important that he *clean* his teeth properly.

Необхідно, щоб він оглянув хворого.

Бажано, щоб ви були в клініці о 2-й годині.

Важливо, щоб він чистив свої зуби правильно.

c) The doctor insists that this procedure *be* carried out immediately.

I wish he *be* well again as soon as possible.

Лікар наполягає на тому, щоб цю процедуру було виконано негайно.

Я хотів би, щоб він видужав якомога швидше.



d) She looks as if she *had been ill*.

You must clean your teeth with a fluoride toothpaste *lest* you *should have* caries again.

He repeated his experiments many times *so that* he *might* get the exact data.

Вона має такий вигляд, ніби після хвороби.

Ви повинні чистити зуби пастою з вмістом фтору, щоб знову не було карієсу.

Він повторював експерименти багато разів, щоб можна було одержати точні дані.

1. Як передається в англійській мові умовний спосіб? Визначте види підрядних речень, вжитих в умовному способі (див. грам. дов. стор. 509)

1) *Translate the sentences and explain why you translate so.*

1. It is necessary that case history be taken before the treatment starts. 2. The dentist suggested that an X-ray picture should be repeated. 3. He looked as if he were ill. 4. It is very likely that sharp pain should disappear in half an hour. 5. It is better to give an injection of antibiotic lest the infection should spread. 6. The doctor insisted that the diet be discontinued. 7. I wish I were you.

2) *Give the full form of the conditional sentences.*

1. Had pulpitis not been controlled, the patient would have had a sharp pain at night. 2. Could the nurse carry out the procedure herself, she wouldn't ask the dentist. 3. Were I in your place, I shouldn't do it.

II. 1. *Translate the words and learn them.*

measure	[ 'meʒə]	remnant	[ 'remnənt]
debris	[ 'debris]	occasion	[ə 'keɪʒn]
raw	[rɔ:]	plain	[pleɪn]
firm	[fə:m]	rinse	[rɪns]
tough	[tʌf]	substitute	[ 'sʌbstɪtju:t]

2. *Read the words and word combinations and translate them.*

**raw** [rɔ:] : raw food, raw meat, raw materials, in the raw, a raw person;

**require** [ri 'kwaɪə] : to require much chewing , to require extra help, to be required by law;

**firm** [fə:m] : firm fruits, firm muscles, firm voice, to stand firmly;

**substitute** [ˈsʌbstɪtju:t] : a substitute for sugar, to substitute.

III. Read the text, translate it.

## ORAL HYGIENE AND THE PREVENTION OF DENTAL DISEASE

Most dental disorders arise «directly or indirectly from two basic diseases of the teeth and their supporting tissues — caries and periodontal disease. Prevention of dental disease therefore entails elimination of food stagnation, as this is the primary cause of caries and periodontal disease. Food stagnation causes plaque formation; *which in turn*<sup>1</sup> leads to acid production, in the case of caries; and to bacterial irritation and calculus in periodontal disease. The methods of prevention are oral hygiene, which is the patient's responsibility; preventive dentistry which is the dental surgeon's contribution; dental health education and increasing the resistance of teeth to disease, which are public health measures. If everyone realized it, a lot of tooth problems would be avoided.

### ORAL HYGIENE

Oral hygiene consists simply of *keeping the teeth free of food debris*<sup>2</sup>, thus preventing plaque formation which leads to dental disease. It can be achieved by cleaning the teeth regularly after meals and not eating between meals. Cleaning is best performed by brushing as this is *the only way*<sup>3</sup> of removing plaque. If brushing is not possible, food debris can be removed by finishing the meal with a detergent food. Such foods are raw, firm, fibrous fruits or vegetables, e.g. apples, pears, carrots, celery, etc. By virtue of their tough fibrous consistency they require much chewing and thereby scour the teeth clean of food remnants.

Although it is easy enough to brush the teeth or eat an apple after meals at home, it may often be inconvenient elsewhere. On such occasions a plain water mouth rinse, which can be swallowed afterwards, is better than nothing.

Of all these methods of cleaning teeth, toothbrushing is the most effective. *When properly done*<sup>4</sup> it removes plaque, whereas detergent foods can only clean away loose food particles. Thus the role of detergent foods or mouth rinsing is not that of a satisfactory alternative to brushing; but an additional measure at the end of a meal, or a substitute when brushing is not possible.



## Notes

- 1 ***which in turn*** — котре, в свою чергу
- 2 ***keepeng the teeth free of food debris*** — утримування зубів чистими від залишків їжі
- 3 ***the only way*** — єдиний шлях
- 4 ***when properly done*** — коли воно правильно здійснене

## Class Assignments

**IV. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. прямо чи непрямо. 2. зубний наліт. 3. спричиняти. 4. уникнути. 5. рештки їжі. 6. сирий. 7. за рахунок. 8. де-небудь ще. 9. полоскання рота водою. 10. краще, ніж нічого. 11. чищення зубів зубною щіткою. 12. тверді продукти. 13. додаткові заходи.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

dental disorder, food stagnation, patient's responsibility, realize, plaque formation, brushing, consistency, occasion, to remove plaque, alternative.

**Exercise 3.** *Answer the questions.*

1. What do most disorders arise from? 2. Why does prevention of dental disease entail elimination of food stagnation? 3. What does food stagnation cause? 4. What methods of prevention do you know? 5. How can plaque formation be prevented? 6. What is oral hygiene? 7. Why is cleaning best performed by brushing? 8. How can food debris be removed if brushing is not possible? 9. What detergent food can you name? 10. What must one do if brushing or eating an apple is not possible? 11. Is a plain water mouth rinse a satisfactory alternative to brushing? 12. What is the most effective method of cleaning teeth? 13. When does tooth brushing remove plaque?

**Exercise 4.** *Finish the sentences using Conditional Sentences.*

1. If a detergent food removed plaque

то було б досить з'їсти яблуко після їди.

то зуби очищалися б без застосування зубної щітки.

то це було б чудовою альтернативою зубній щітці там, де застосування її неможливе.

2. If plaque formation didn't cause acid productions

то це не призводило б до карієсу.

то це не призводило б до захворювання пародонту.

**Exercise 5.** *Pick out the sentences corresponding to the text.*

1. a) Prevention of dental diseases entails elimination of food stagnation.  
b) Prevention of dental disease entails elimination of a detergent food.
2. a) Oral hygiene consists of preventing dental disease.  
b) Oral hygiene consists of keeping the teeth free of food debris.
3. a) A detergent food includes raw, firm fruit and vegetables.  
b) A detergent food includes soft and little acid fruit and vegetables.

**Exercise 6.** *Make up 10 questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Будь-яка профілактика включає комплекс заходів, котрі запобігають виникненню несприятливих факторів, що спричиняють хворобу. 2. Стоматологічні захворювання виникають внаслідок впливу етіологічних факторів. 3. Гігієна ротової порожнини — складова частина запобігання стоматологічним захворюванням. 4. Профілактика карієсу може бути здійсне-



на комплексом заходів, спрямованих на усунення карієсогенної ситуації в порожнині рота та підвищення резистентності тканин зуба. 5. Важливе значення у профілактиці пародонту належить своєчасному та ретельному видаленню зубних відкладень.

**Exercise 9.** *Express the idea of the text in one sentence.*

## **DIETARY DISCIPLINE.**

it cannot be emphasised too strongly that, however efficiently the teeth are cleaned after meals, caries will still occur if snacks are taken between meals. Acid forms within minutes of eating refined carbohydrate and the effect of toothbrushing is wasted if frequent snacks are eaten between meals. In fact, dietary discipline is far more important for caries prevention than toothbrushing.

## **LESSON 37**

### **Home Assignments**

I. 1. *Remember the facts:*

Do you know that —

... the food of modern people is soft and acid to evoke the «natural» agencies of protection and it would seem reasonable to add some «artificial» means to remove debris from the teeth.

... the brush must be a small one (3,5 - 4 cm); the bristles should be neither too hard nor too soft, and should be of unequal length.

... only about two teeth can be brushed at the same time.

2. *Read the passage filling in the missing active words.*

One of the most important functions of ... lies in its ability to neutralize ... and maintain an alkaline environment in the mouth for much of the time. This is due to the presence of calcium and phosphate in the ... secretion. This reservoir of calcium and phosphate also serves to reduce to some extent the demineralization of the ... during acid attack and to remineralise them when the normal pH at the ... surface is restored. This remineralization process is greatly facilitated by the presence of ... ions.

( acid, salivary, saliva, fluoride, tooth, teeth )

II. *Translate and learn the following words.*

accessible	[ək 'sesəbl]	rotary	[ 'routəri]	dislodge	[dis 'lɒdʒ]
massage	[ 'mæsa:ʒ]	scrub	[skrʌb]	skill	[skil]
bristle	[brisl]	motion	[mouʃn]	lack	[læk]
add	[æd]	abrasion	[ə 'breɪʒn]	valuable	[ 'væljuəbl]
stroke	[strouk]	expel	[ik 'spel]	properly	[ 'prɒpəli]

III. *Read the text, translate it and say what new you have learnt about brushing.*

## TOOTHBRUSHING

Brushing after meals can only be effective if it removes plaque. The object is to clean every accessible tooth surface, thus removing food debris and plaque and massaging the gum margin.

Toothbrushes with a small head and medium bristles are probably the most effective. The brush is rinsed and toothpaste added. Several strokes are used on each section of the mouth. Buccal, lingual, mesial and distal surfaces are cleaned by a rotary motion from gum to tooth. Occlusal surfaces are cleaned by a scrubbing action. Finally the gingival margins are cleaned by a backwards and forwards motion which must be done gently to avoid abrasion of the necks of the teeth.

*Each jaw is done in turn*<sup>1</sup> and the mouth is then thoroughly rinsed with warm water to expel food debris dislodged by the toothbrush. Brushes should be washed afterwards and allowed to dry.

Correct and effective toothbrushing in the way described requires time, knowledge and skill. Many people lack these requirements and brushing is ineffective as a preventive measure. The whole process can be made simpler for such people by using an electric toothbrush. Teeth are cleaned rapidly and effectively as most of the movements are done automatically. It is particularly valuable for children and the physically handicapped. Although it is no better than<sup>2</sup> a properly used ordinary toothbrush, it is probably preferable as so few people<sup>3</sup> use an ordinary one properly.



## Notes

- 1 ***Each jaw is done in turn ...*** — Кожна щелепа чиститься одна за одною ...  
2 ***Although it is no better than ...*** — Хоч вона й не краща за ...  
3. ***so few people*** — небагато хто

## Class Assignments

**III. Exercise 1.** *Find in the text English equivalents for the following words and word combinations.*

1. доступна поверхня зуба. 2. край ясен. 3. нанести пасту. 4. обертальний рух. 5. зішкрібати. 6. стирання, абразія. 7. ретельно. 8. дати висохнути. 9. весь процес. 10. інваліди. 11. котрий переважає. 12. правильно.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

plaque, tooth surface, stroke, gingival margin, food debris, require, requirement, automatically, ordinary toothbrush.

**Exercise 3.** *Answer these questions.*

1. When can brushing be effective? 2. What is the object of toothbrushing? 3. What toothbrush is the most effective? 4. How is the brush used? 5. By what motion are buccal, lingual, mesial and distal surfaces cleaned? 6. How are occlusal surfaces cleaned? 7. Why must the gingival margins be cleaned by a backwards and forwards motion? 8. Why should the mouth be thoroughly rinsed? 9. Do many people know how to brush the teeth correctly and effectively? 10. How can the process be made simpler? 11. Why are teeth cleaned rapidly by using an electric toothbrush? 12. Is it better than a properly used ordinary toothbrush?

**Exercise 4.** *Insert articles where necessary.*

By means of ... toothbrush a considerable amount of fer-

mentable material may be removed from ... teeth. The form of ... toothbrush and ... manner of using it leave much to be desired. The brush must be ... small one with unequal bristles in length. With such ... brush all surfaces of the teeth can be reached. It is important that only about two teeth should be brushed at ... same time. As ... rule teeth are not brushed - they are rubbed and scrubbed. They should be brushed in ... same manner that a clothes-brush is used.

**Exercise 5.** *Insert prepositions or adverbs.*

The teeth must be brushed systematically ... the morning, and ... the evening. The brush should of course be kept clean, either by permanent immersion in a weak antiseptic solution or by being washed daily ... soap and water.

Not more than two teeth ... a time should be brushed, and this should be done both horizontally and vertically (away from the gums) ... the buccal and labial aspects, and forwards and sideways ... the occlusal surface; and the total time, including several cleansings of the bristles, need not exceed two or three minutes.

It is obvious that the brushing ... teeth cannot be relied upon alone to prevent caries, but it should be regarded as an adjuvant to other means ... prophylaxis.

**Exercise 6.** *Make up questions based on the text and answer them.*

**Exercise 7.** *Give a summary of the text.*

**Exercise 8.** *Translate into English.*

1. Зубними щітками користуються для видалення рештків їжі та зубного нальоту з усіх поверхонь зубів та міжзубних проміжків. 2. У разі захворювання пародонту варто брати щіточку з м'якішою щетиною. 3. Термін користування однією зубною щіткою не повинен перевершувати 6-ти місяців. 4. Рухи щітки під час чищення зубів мають бути спрямованими від шийки зуба в бік ріжучого краю, тобто по вертикалі. 5. Зубні бляшки видаляються з поверхні зуба лише через 30 секунд після ретельної механічної обробки. 6. Багато хто не знає, як правильно та ефективно чистити зуби. 7. Тривалість чищення, як правило, не менше трьох хвилин.



**Exercise 9.** Read the text using a dictionary. Compose the plan of the text.

## PLAQUE

Plaque is a film of material composed of masses of bacteria in a sticky glycoprotein matrix which adheres to the surfaces of teeth, particularly in locations which are inaccessible to natural or mechanical cleansing. New plaque forms within a few hours on teeth which are thoroughly cleaned and tends to accumulate and thicken with the passage of time unless regularly removed. Plaque is of great importance in the aetiology of dental disease because of the ability of some of the bacteria to metabolise sugar and form acid and the property of others to produce harmful products which can cause inflammation of the gums (gingivitis) and destruction of the periodontal tissues (periodontal disease). A diet with a high sugar content often produce particularly heavy accumulations of plaque. Both plaque which is allowed to remain in the gingival crevice between the gum margin and neck of the tooth and that occurring on the tooth surfaces above the gum margin can calcify and harden to form tartar (sub-gingival and supra-gingival calculus). This tends to retain further harmful accumulations of bacteria in contact with the periodontium.

## LESSON 38

### Home Assignments

I. 1). Translate and learn the following words.

inspection	[in 'spekʃn]	warn	[wɔ:n]
chairside	[tʃeəsaɪd]	heed	[hi:d]
poster	[ 'pəʊstə]	emphasize	[ 'emfəsaɪz]
pamphlet	[ 'pæmfli:t]	dietary	[ 'daɪətri]
suck	[sʌk]	cancel	[kænsəl]
dye	[daɪ]	altogether	[.ɔ:ltə 'geðə]
stain	[steɪn]		

2). Give verbs from the following nouns. Translate them.

inspection, instruction, reminder, explanation, demonstrating,

combination, replacement, prevention, detection, requirement, treatment, restoration, extraction, addition.

3). Translate the sentences paying attention to the italicized words.

The beneficial effect of cleaning teeth after meals is *cancelled out* if food debris is *replaced by* frequent snacks between meals. The patients should be *warned against* snacks between meals. *Either* some fruits should be taken instead *or* snacks stopped.

II. Read and translate the text. Prove that «prevention is better than cure».

## PREVENTIVE DENTISTRY

Preventive dentistry includes instruction in oral hygiene; regular inspection; and any necessary treatment for prevention and removal of stagnation areas.

Instruction in oral hygiene is best given *at the chairside*<sup>1</sup>, whilst posters and pamphlets in the waiting room serve as an extra reminder. Patients are told how dental disease arises and how it can be prevented. This entails an explanation of the all-important role of plaque and the effects it produces. The most impressive way of demonstrating plaque on their own teeth is to give patients a DISCLOSING TABLET to suck. This contains a dye which stains it bright red. Patients can then see for themselves in a mirror whether they are cleaning their teeth properly. They are then shown how to use a toothbrush correctly, advised to clean their teeth after every meal, and warned against snacks between meals.

However, *they are not likely*<sup>2</sup> to heed such advice unless it is practicable. Patients must therefore be told how to clean their teeth when a toothbrush is not available. The best substitute in such cases is a detergent food or plain water mouth rinse.

It must be emphasized that the principle of cleaning after every meal has little effect unless it is combined with dietary discipline to stop eating between meals. The beneficial effect of cleaning teeth after meals is cancelled out if food debris is continually replaced by frequent snacks between meals. They should either be stopped altogether or some fruit taken instead.

Prevention is better than cure. Patients should be encouraged



to have a regular inspection twice a year. Oral hygiene can then be checked with disclosing tablets and any deficiencies shown to the patient. Further instruction can then be given if necessary. *Bite-wing X-rays*<sup>3</sup> are taken at the same time for early diagnosis of caries.

These visits will detect incipient dental disease which can be treated far more easily in its earliest stages than later. Such treatment may involve all branches of dentistry. Periodic scaling to remove small deposits of calculus will prevent the onset of periodontal disease before it ever reaches the stage of gingivitis. Early treatment of caries enables affected teeth *to be conserved rather than extracted*<sup>4</sup>.

## Notes

- 1 ***at the chairside*** — біля стоматологічного крісла
- 2 ***they are not likely*** — навряд чи вони
- 3 ***bitewing X-rays*** — рентгенівські знімки з прикусним пристроєм
- 4 ***to be conserved rather than extracted*** – бути збереженим, а не видаленим

## Class Assignments

III. **Exercise 1.** Find in the text English equivalents for the following words and word combinations.

1. регулярний огляд. 2. плакати і буклети. 3. спосіб, котрий найбільше вражає. 4. набуває яскраво-червоного забарвлення. 5. коли зубна щітка недоступна. 6. дисципліна харчування. 7. між прийманням їжі. 8. замість цього. 9. двічі на рік. 10. подальші інструкції. 11. захворювання на ранній стадії. 12. початок захворювання. 13. пошкоджені зуби.

**Exercise 2.** Quote the sentences in which the following words and word combinations are used in the text.

removal, extra reminder, to entail, to strain, to heed, to empha-

size, beneficial effect, cure, to be encouraged, early diagnosis, to involve, to enable.

**Exercise 3.** *Answer these questions.*

1. What does preventive dentistry include? 2. When is instruction in oral hygiene best given? 3. What are patients told? 4. What does the most impressive way of demonstrating plaque contain? 5. The patients are only shown how to use a tooth brush correctly, aren't they? 6. How can patients clean their teeth if a toothbrush is not available? 7. Why is cleaning after every meal not enough unless it is combined with dietary discipline? 8. What is better prevention or cure? 9. How often should patients have a regular inspection? 10. In what stage can any dental disease be treated easily? 11. What will periodic scaling prevent? 12. How can you characterize early treatment of caries?

**Exercise 4.** *Insert articles where necessary. Retell it.*

If teeth have already been lost, prosthetic treatment to restore ... normal occlusion and function will prevent food traps developing. For children, orthodontics can prevent or cure irregularities of ... teeth which would otherwise form inaccessible stagnation areas, difficult to keep clean with even ... most conscientious attempts at oral hygiene.

Dental disease, arising as it does from areas of food stagnation on ... teeth, can therefore be prevented to ... large extent by patients' own efforts at keeping them scrupulously clean at all times. In addition, regular dental inspection and treatment can prevent ... vicious circle of dental disease developing, by providing treatment at ... very earliest stages before caries and calculus have time to cause serious damage to ... dentition.

**Exercise 5.** *Make up 6 questions based on the text and answer them.*

**Exercise 6.** *Give a summary of the text.*

**Exercise 7.** *Translate into English.*

1. Профілактика в стоматології передбачає різні способи: рекомендації щодо гігієни ротової порожнини, регулярні огляди,



лікування з метою запобігання захворювання. 2. Пацієнтам треба пояснити, як можна запобігти карієсу. 3. Шляхом забарвлення зубного нальоту спеціальним барвником перевіряють, чи правильно чистяться зуби. 4. Пацієнт має бачити сам, чи правильно він чистить зуби. 5. Якщо зубна щітка недоступна, треба, принаймні, з'їсти яблуко чи прополоскати рот водою. 6. Чищення зубів після їжі не буде ефективним, якщо ви перекусюєте між прийомами їжі. 7. Пацієнта необхідно переконати проходити регулярне обстеження ротової порожнини двічі на рік. 8. Це допоможе в діагностуванні захворювання ротової порожнини на їх ранній стадії. 9. Своєчасне лікування забезпечить збереження зубів протягом всього життя.

**Exercise 8.** *Read the text. Give an annotation of it.*

TOPICAL FLUORIDATION means applying fluoride directly to the crowns of teeth. It can produce a substantial reduction in caries but is not nearly so effective as water fluoridation. The teeth are carefully polished and dried, and stannous or sodium fluoride solution is painted over them. Alternatively, sodium fluoride gel is applied to the teeth in a special impression tray. The gel has a syrupy consistency which is more acceptable to most patients. It is a valuable form of preventive dentistry for children.

If FLUORIDE TABLETS are taken daily throughout infancy, childhood and adolescence until every tooth has erupted, they should produce similar results to water fluoridation. Only the keenest parents will keep this up until all teeth have erupted, so it is not a suitable method for the general public.

When used regularly, FLUORIDE TOOTHPASTE gives a slightly greater caries reduction than ordinary toothpaste. Any acceptable way of reducing caries is to be recommended and use of fluoride toothpaste is accordingly advocated.

## LESSON 39

### Home Assignments

I. 1. *Translate and learn the following words.*

teenager            [ 'ti:neɪdʒə]            straighten            [ streɪtn]

dummy	[ˈ dʌmi]	level	[ˈ levl]
evade	[i ˈ veɪd]	amount	[ə ˈ maʊnt]
midwife	[ˈ midwaɪf]	accept	[ək ˈ sept]
toddler	[ˈ tɒdlə]	confine	[kən ˈ faɪn]

2. Read the words and word combinations, translate them.

**remain** [ri ˈ mein] : remained, remainder, if you take 3 from 8-5 remains;

**accept** [ək ˈ sept] : accepted, accept a gift, an invitation, it is an accepted fact;

**ensure** [in ˈ juə] : ensured, I can ensure that, ensurement;

**vast** [vɑːst] : vast amount, vast sums of money, vast masses.

3. Match the following words logically.

a) urgent, damage, regular, appear, vast, accept, minimum

b) restoration, disappear, irregular, small, reject, unimportant, maximum

II. Read the text, translate it and make up the plan of it.

## PUBLIC HEALTH MEASURES

### Dental Health Education

The practitioner can explain the causes and prevention of dental disease to individual patients in his surgery. But there still remains<sup>1</sup> an urgent need for a much greater effort by the public health services. Expectant and nursing mothers, parents of schoolchildren, and young teenagers are the groups most in need of advice on dental care. Much more publicity is necessary<sup>2</sup> to warn these groups of the damage done by dummies used with sweetened fruit juices; of acquiring the habit of unrestricted snacks between meals; and evading dental inspection until toothache develops. Doctors, midwives, health visitors, clinic staff and school teachers all have a part to play in<sup>3</sup> helping the dental profession to educate the public.

Nursing mothers should be encouraged to bring their babies when they have their own dental inspections. Toddlers will thereby accept the dental surgery as a place of interest and soon become regular and co-operative patients themselves, long



before any treatment is necessary. The discipline of confining sweets to mealtimes and brushing after meals can be developed at an early age; and will establish good dental habits of lifelong value.

Parents should be warned of the danger of sticky carbohydrates causing caries and encouraged to restrict consumption of sweets between meals. In school, steps should be taken to ensure that school dinners do not leave a film of carbohydrate debris on the teeth.

Young teenagers soon realise the importance of good appearance and this can be utilized in dental health education. Regular visits to the dentist for scaling and polishing, filling cavities in front teeth, orthodontics for straightening teeth, and the value of dietary discipline and oral hygiene: all these ways of improving appearance are freely available to them, but too little is being done at national level to make it known.

Many excellent films, posters and pamphlets are already available for display<sup>4</sup> in clinics and schools but these forms of dental health education are only reaching a small section of the population. To help reduce the vast amount of dental disease, the entire population needs to be shown how to maintain good dental health by dietary discipline, strict oral hygiene and regular dental inspection.

## Notes

- <sup>1</sup> ***there still remains*** — все ж залишається
- <sup>2</sup> ***much more publicity is necessary*** — значно більше освітлення необхідне
- <sup>3</sup> ***all have a part to play in*** — всі грають певну роль у
- <sup>4</sup> ***are available for display*** — доступні для демонстрації

## Class Assignments

III. Exercise 1. Find in the text English equivalents for the following words and word combinations.

1. лікар загального профілю. 2. нагальна потреба. 3. органи охорони здоров'я. 4. групи, які найбільше потребують. 5. постійні перекусування. 6. задовго до того, як. 7. у ранньому віці. 8. об-

межити. 9. гарантувати. 10. покращення зовнішнього вигляду. 11. величезна кількість стоматологічних захворювань.

**Exercise 2.** *Quote the sentences in which these words and word combinations are used in the text.*

surgery, expectant, to warn, nursing mothers, mealtime, to leave, to straighten, to reach, to reduce.

**Exercise 3.** *Answer these questions.*

1. What can the practitioner explain in his surgery? 2. It is enough to be explained by the dentists only? 3. What groups of population are in need of advice on dental care? 4. Why is much more publicity necessary? 5. Who must help educate the public? 6. How can babies become regular patients of dental surgeries? 7. What steps should be taken in school? 8. Why are regular visits important for teenagers? 9. What means can help in dental health education? 10. Why must the entire population be shown how to maintain good health? 11. How can good dental health be maintained?

**Exercise 4.** *Insert the necessary prepositions.*

## INCREASING RESISTANCE TO CARIES

Increasing the resistance ... tooth to acid attack has already been mentioned. It can be done ... dietary measures and fluoridation. But fluoridation is a subject ... such importance to the dental profession that it is covered ... much more detail. Decisions to introduce fluoridation are made ... local authority level and every dental student should know its benefits so that they may voice their opinion ... the basis of knowledge rather than emotion.

**Exercise 5.** *Complete the sentences according to the text.*

1. The dentist can explain ... . 2. Pregnant women and children are the group ... . 3. Children must accept the dental surgery as ... . 4. Teenagers must realize the ways of improving appearance



by regular visits to the dentist for ... . 5. The entire population needs to be shown how to maintain good health by ... .

**Exercise 6.** *Put questions on the text and answer them.*

**Exercise 7.** *Say to what conclusion you have come after having read this text.*

**Exercise 8.** *Point out in the text the sentences with should and define its function.*

**Exercise 9.** *Translate into English.*

1. Стоматолог повинен пояснювати причини захворювання та способи запобігання йому, коли пацієнт приходить до нього в кабінет. 2. Але потрібний цілий комплекс зусиль, щоб ця інформація дійшла до всього населення. 3. Більше уваги треба приділяти групам, котрі потребують особливої стоматологічної допомоги: вагітним та матерям, котрі годують груддю, школярам. 4. Якщо дитину під час першого відвідування стоматологічного кабінету зацікавили, то в подальшому з відвідуванням буде менше проблем. 5. Існує величезна кількість унаочнення, котре розповідає про профілактику стоматологічних захворювань, проте воно доступне не всім. 6. Освіта по збереженню здорової ротової порожнини є справою кожного з нас.

**Exercise 10.** *Try to understand the following text without using a dictionary.*

## DIET

A correct diet during the period of tooth formation is necessary to produce teeth of good structure. Such teeth are more resistant to caries than those which are less well formed. Teeth are forming throughout pregnancy and childhood so it is essential that the diet contains sufficient calcium, phosphorus and vitamins to ensure good tooth structure. Mothers attending ante-natal and child welfare clinics are accordingly advised that dairy products, eggs, meat and fish will provide all the calcium, phosphorus and vitamin D; whilst fresh fruit and vegetables will supply vitamin C. Adequate consumption of all these, together with welfare vitamin supplements will give their children a better chance of having well formed teeth. Caries will still occur but should not progress so rapidly as in teeth of poorer structure.

## LESSON 40

### REVISION

#### Class Assignments

1. *Read the text, translate it in a written form using a dictionary.*

### FLUORIDATION

Fluoride is a natural constituent of most water supplies. It consequently forms part of the diet throughout the period of tooth formation and is incorporated into the teeth. The effect of water containing one part per million (1 p.p.m.) is a fifty per cent reduction in caries. Above 1 p.p.m. the reduction is no greater but an unfortunate side effect can occur; an ugly brown staining of enamel called mottling. Below 1 p.p.m. there is no significant reduction in caries. Thus the ideal amount of fluoride in water is 1 p.p.m.; at which level it has only one effect — a fifty per cent reduction in caries. Fluoride has no adverse effects on general health, even when it is in such high concentrations that mottling is disfiguring.

A few places are lucky enough to have the right amount naturally present. This is known as NATURAL FLUORIDATION. Most places, however, are less fortunate as their water supplies are deficient in fluoride. But the same effect can be produced in these deficient areas by adding fluoride at the waterworks until it reaches the ideal concentration of 1 p.p.m. This is now being done on an increasing scale throughout the world and is called ARTIFICIAL FLUORIDATION.

Fluoride only exerts its maximum effect if it is present in the water until all the permanent teeth are erupted. Its action is to make enamel more resistant to acid attack, and this effect lasts throughout life. Fluoridation of water supplies is the simplest, cheapest, safest and most effective public health measure known for prevention of caries. Without any personal effort, caries is reduced by fifty per cent in the entire population, provided only that they use fluoridated water from birth until eruption is complete. Until more local authorities are enlightened enough to fluoridate their water supplies, some alternatives are available. These are topical fluoridation, fluoride tablets and fluoride toothpaste.

All these alternatives to fluoridation of water supplies are less effective. They require individual effort and only benefit the users. As a public health measure the case for water fluoridation is overwhelming. Until it is generally adopted, however, caries will



continue to share with periodontal disease the description of commonest disease of civilization.

To sum up the whole chapter; there is no single method of preventing dental disease. It can best be reduced by a combination of all possible means. These are:

1. Fluoridation of water supplies.
2. Dental health education.
3. Correct diet during pregnancy and childhood.
4. Dietary discipline.
6. Strict oral hygiene.
6. Regular dental inspection.
7. Topical fluoridation.

II. *Read the text and give an annotation of it.*

## **DENTAL DISEASE AND THE ENVIRONMENT**

It is apparent from surveys of dental health and treatment need that the dental services have had little effect in preventing the occurrence of dental disease in the population. While large sums of money are spent each year on the treatment of caries and to a lesser extent periodontal disease, a derisory amount is spent on dental health education and preventive care programmes.

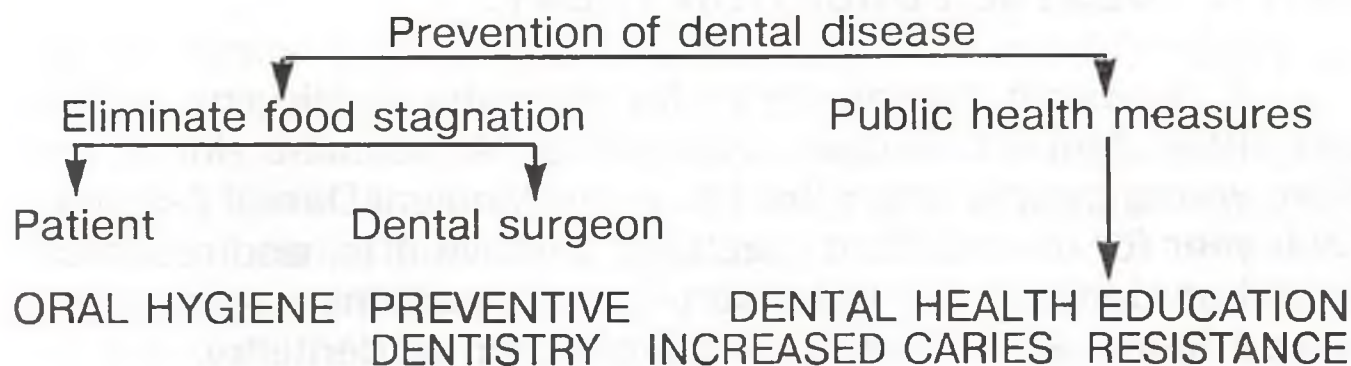
Moreover the various classes of dental auxiliary who are capable of providing preventive care are too few in numbers to make an appreciable impact on the incidence of dental disease.

However, there is one environmental factor that can bring about a dramatic reduction in the incidence of caries. People who from birth consume water which contains 1 mg/l fluoride, either occurring naturally or introduced artificially, experience only half the amount of caries of those who drink non-fluoridated water. Moreover the benefits in terms of reduced operative treatment need, including extractions, general anaesthetics and fillings, are commensurate with this observed reduction in caries. Thus this safe, highly cost-effective preventive measure is capable of having a far greater effect on the level of caries experience in the population than any conceivable increase in the dental services. Fluoridation is a public health measure in the true sense, for all members of the population benefit and no personal sacrifice or effort is required on their part.

Unfortunately no such environmental measure exists to combat periodontal disease. However, the introduction of fluoridation would release dental personnel to concentrate on its prevention, and devote to periodontal disease the attention which its destructive outcome in terms of tooth mortality undoubtedly warrants.

III. Speak on the topic «*Prevetion of dental disease*», using the summary.

### Summary



#### *Oral Hygiene*

Clean teeth after every meal.

(a) Toothbrush

(b) Detergent food — raw fruit or vegetable

(c) Mouth rinsing.

Avoid sticky carbohydrate between meals.

Apple  
Pear  
Carrot

#### *Preventive Dentistry*

Instruction in oral hygiene.

Regular inspection twice a year.

Early treatment.

↓  
Fillings

Scaling

Prosthetics

Orthodontics

Topical fluoridation.

#### *Increased Caries Resistance*

Adequate diet in pregnancy and childhood

Calcium.  
Phosphorus.  
Vitamins.

#### *Fluoridation.*

Natural: Over 1 p.p.m. —————→ 50% less caries + mottling.

1 p.p.m. —————→ 50% less caries.

Under 1 p.p.m. —————→ Ineffective.

Artificial: 1 p.p.m. —————→ 50% less caries.

Topical: Stannous or sodium fluoride solution painted on teeth.  
Sodium fluoride gel applied in special tray.

Fluoride toothpaste: Slightly less caries.

Fluoride tablets: Impracticable as public health measure



## CYCLE IV. SUPPLEMENTARY TEXTS.

### UNIT I. DENTAL EDUCATION TODAY.

If a young person cares for dentistry in Ukraine he/she can enter dental Collegies, Schools or Academies. More and more young people enter the Ukrainian Medical Dental Academy each year for its excellent teaching, creative arts, and research. Dental students at the Ukrainian Dental Academy can look to a secure future in the health care profession of dentistry.



The Ukrainian Medical Dental Academy was given this name in 1995. It is originated from the Kharkov Medical Academy (1921) that had the first odontologic faculty in Ukraine. In 1967 the Kharkov Medical Dental Institute moved to Poltava.

What is the Ukrainian Medical Dental Academy now? There are 4 departments, 52 chairs, 458 persons of teaching personnel in it. 16 Academicians, 58 Doctors of Medicine and 260 Professor Assistants are among them. Some scientific schools are engaged in scientific research of fundamental problems in dentistry. They are concerned with the health service practice, introducing new methods of diagnostic, treatment and prophylaxes of different diseases.

The Dental Department is 75 years old. It is located in modern buildings that offer well-organized space and the latest equipment for teaching and research. One building is completely devoted to clinical teaching, with various departmental clinic facilities, laboratories, and research space. Dental faculty includes specialists in every discipline of dentistry. UMDA offers graduate programs in all dental specialties - endodontics, operative dentistry, oral and maxillofacial surgery, oral pathology, orthodontics, pediatric dentistry and prosthodontics. In addition, residencies in advanced general dental education and in general practice are offered.

## **IOWA'S COLLEGE OF DENTISTRY.**

The University of Iowa established a Department of Dentistry in 1882 with an enrollment of 14 students. In 1900 it became a college of The University of Iowa. Today, with an enrollment of 288 students, The University of Iowa College of Dentistry is the only provider of dental education in Iowa.

The college enjoys a close relationship with the other colleges that are parts of The University of Iowa's health science center — the College of Medicine, the College of Nursing, and the College of Pharmacy. The health science center has earned international recognition through its teaching, research, and service activities.

Iowa's College of Dentistry is located in the Dental Science Building, one of a number of major facilities in the health science Center. The attractive modern building offers well-organized space and the latest equipment for teaching and research. One complete wing of the college is devoted to clinical teaching, with various departmental clinic facilities, laboratories, and research space. The other wing houses teaching and research laboratories, the college's administration, and programs in community dentistry. The nearby Hardin Library for the Health Sciences houses the University's medical materials, including more than 18,000 volumes on dental subjects and 283 dental journals.

Students at Iowa enjoy a 3 to 1 ratio of dental students to full-time clinical faculty. Faculty include generalists and specialists in every discipline of dentistry as well as many faculty who hold Ph.D.'s in other disciplines. Iowa's College of Dentistry is one of only two in the nation that offers graduate programs in all dental specialties — dental hygiene, endodontics, operative dentistry, oral and maxillofacial surgery, oral pathology and diagnosis, orthodontics, pediatric dentistry, periodontics, preventive and community dentistry, and prosthodontics. In addition, residencies in advanced general dental education and in general practice are offered. Students who enroll in the College of Dentistry will find themselves among some 24,000 undergraduate students and 6,000 graduate and professional students. The student body at Iowa comes from all 50 states and 94 foreign countries.

The University of Iowa is in Iowa City, a community of 50,500



in eastern Iowa. The central campus comprises 90 major buildings on 900 acres along both sides of the Iowa River. The full campus of 1,900 acres includes facilities at nearby Oakdale and Lake MacBride and at Lyke Okoboji in northwest of Iowa. Interstate 80 connects Iowa City with Chicago and Omaha, which are within 250 miles, as is St. Louis. Iowa City is 300 miles from Minneapolis, and 310 miles from Kansas City.

Many colleges and universities around the country offer pre-professional programs for the health sciences, and students enrolled in them usually do well when admitted to dentistry. Undergraduate students at The University of Iowa don't have to declare a «predental» major. Students interested in dentistry can declare a major in any area — biology, psychology, engineering, music, or literature — and still be admitted to the College of Dentistry.

College courses in biology, chemistry, and physics are required for admission to The University of Iowa College of Dentistry, but the rest of your course work you may select yourself. Although the minimum academic requirement for admission to the College of Dentistry is the completion of 94 semester hours of study at an accredited college, most students complete a bachelor's degree before entering dental school. This year about 75 percent of the College of Dentistry's freshman students have a bachelor of science or a bachelor of arts degree.

A student's predental program of study should include the following courses:

English — composition, rhetoric, and speech courses required for a bachelor's degree at the college attended;

Physics — one year (8 semester hours). One-fourth of the hours must be in laboratory work.

Chemistry — two years (16 semester hours). One year must be in organic chemistry of which one-fourth must be in laboratory work.

Biology — one year (8 semester hours). May be satisfied by a one-year course in general biology, or both zoology and botany. Laboratory work must be included.

Electives — a well-rounded background in the social sciences, philosophy, psychology, history, foreign languages, and mathematics.

While you don't have to be a straight «A» student, your grades are important for admission to the dental college.

The mean college grade-point average for entering dental students at Iowa is around 3.20 (on a 4.0 scale). In addition to your academic record, the College of Dentistry seeks well-rounded applicants who are interested in science and who can work well with people.

The college strives for cultural, economic, and educational diversity among its students.

Applicants must apply one year in advance of the time they wish to enroll in the College of Dentistry. The Dental Admission Test (DAT), sponsored by the Council on Dental Education of the American Dental Association, must be taken during that time too.

Students from participating undergraduate colleges can be admitted to the College of Dentistry and allowed to postpone their enrollment in the College of Dentistry by being accepted to the Dental Early Admission Program (DEAP).

Under this program, students interested in dental career at Iowa are admitted as early as the first year of their undergraduate college education, but postpone enrollment to the College of Dentistry until they have completed at least three years of their undergraduate education.

During these three years, students study a liberal arts curriculum that incorporates dental prerequisite courses. Once selected for the program, students must maintain a 3.20 grade-point average to ensure enrollment in The University of Iowa College of Dentistry.

The University of Iowa's comprehensive doctor of dental surgery (D.D.S.) degree program prepares students to begin professional dental practice immediately after graduation.

During the first year of study, emphasis is placed on the basic sciences, the biological foundation of the dental profession. First-year courses include anatomy, biochemistry, histology, physiology, general and oral pathology, pharmacology, and microbiology. Dental technique courses are also part of the curriculum, and Iowa offers initial patient care expenses in preventive dentistry during the first year.

The second year builds on the basic science courses and



involves experiences in more advanced dental techniques. Even at this early stage, you will be rendering restorative dental care for patients in the Operative Dentistry Clinics — a key feature of the Iowa program.

Iowa's third year is much different from that of other schools. It is a year of clinical rotations from one specialty to another in all eight dental specialties. These in-depth studies occur in concentrated ten-week periods. At the end of your third year, you have developed skills in every area of dentistry.

To put it all together, the fourth year is a year of practice under supervision. Management skills are emphasized as you practice in a simulated office setting, providing all the care a patient needs. There are also many programs available outside the college, such as experience in a private dental practice, a mobile dental unit, and in hospital settings.

In addition to the general D.D.S. program, the college offers students the opportunity for graduate study in all of the specialties including the following:

- endodontics — the treatment of diseases of the dental pulp;
- oral and maxillofacial surgery — extractions and treatment of injuries, diseases, and deformities of the mouth, jaw, and face;
- oral pathology — performance of laboratory tests and examination of material needed to diagnose oral problems;
- orthodontics — prescribing and fitting braces to straighten crooked or poorly spaced teeth, correcting the bite and alignment of the jaws;
- pedodontics — specialization in the preventive and therapeutic care of children and the treatment of handicapped persons of all ages;
- periodontics — treatment of gum disease and instruction to patients in the prevention of recurrences;
- prosthodontics — design and fit of bridgework and dentures to replace missing teeth and design substitutes for missing oral tissues;
- public health — promotion of public education, prevention, and treatment of dental diseases for communities.

The College of Dentistry offers two advanced programs beyond the D.D.S. program. There is a master of science program that includes an original research project and a thesis.

The other is a specialty certificate program.

## **The Teaching of Conservative Dentistry in One United Kingdom Dental School**

### **Introduction**

The teaching of undergraduate dental surgery in the United Kingdom of Great Britain is strictly controlled by the General Dental Council. This is an autonomous body, consisting in the most part of elected persons from all groups involved in dentistry. This Council is empowered by Parliament to oversee dental education and ensure its standard and uniformity throughout the ten English, two Scottish, one Welsh and Northern Irish Dental Schools. To this end all dental schools are visited every five years by a small committee who inspects every aspect of the provision of undergraduate dental education at that University. This committee can withdraw the right of the School to train dentists if they consider the standard of education is inadequate. All dental schools are monitored very carefully and there is a uniform standard of dental education provided throughout the United Kingdom. All schools must train graduates to a standard such that they are able to practice independently all forms of dental treatment.

Although the overall standard is uniform throughout the country each dental school has its own unique curriculum. The contents of the curriculum are controlled by the General Dental Council. However each school has a unique curriculum as to how much and the manner in which each subject is taught. We shall discuss in this article the curriculum for the largest dental school in the United Kingdom, the United Medical and Dental School of Guy's and St. Thomas', known as UMDS and based at Guy's Hospital, London. The whole curriculum is so large that to discuss it all at this time is inappropriate. We shall concentrate on the teaching of the subject of conservative dentistry, this includes operative dentistry, applied dental materials, crownwork, bridge-work and endodontics.

Implantology is not taught at the undergraduate level at the present time.



## **Year One**

The first year of the five year dental course is taken up by the basic science subject of anatomy, physiology, biochemistry, dental anatomy, applied dental science, radiological sciences and dental material science. During the teaching of the applied dental sciences students attend clinics to observe the provision of conservation treatment by senior colleagues. They keep a logdiary of all they see and report on one case to a supervisor at the end of this course.

## **Year Two**

During the second year, the preclinical course in conservative dentistry begins. This takes place over four sessions (half days) per week for 12 weeks. The aim of this course is to learn the assessment, diagnostic and treatment skills necessary to deal with the majority of restorative problems encountered in routine patient care, excluding crowns and bridges.

This is taught in four modules:

module 1

diagnosis of caries and other lesions of enamel and dentine  
removal of caries and stabilisation with temporary restorations

module 2

diagnosis and management of pulp disease  
endodontic treatment of anterior and posterior teeth

module 3

composite and glass ionomer restorations including wrought posts for the retention of anterior composite cores

module 4

amalgam restorations including pin and post retention

At the end of this course each student is assessed with a practical test including an oral examination, a written test and a display of all practical work undertaken throughout the modules. The tests must be passed before students are allowed to go on and treat patients.

Once the student has been successful in the preclinical tests he/she may enter the clinical part of the course. This begins in the second term of Year 2. For the remaining two terms of the academic year the student sees patients for four sessions per

week. During these sessions they carry out all routine conservative dentistry for the patient under the supervision of a member of staff. The staff: student ratio at this time is about 1:10. Each student has a dental unit allocated to them for this treatment. Over two floors of the School there are 76 dental units available for use by the undergraduates. Each student is given a box containing all instruments necessary for conservative dentistry. Handpieces are allocated centrally each day to allow for sterilisation. Restorative materials are handled from a central area to minimise wastage.

During the latter part of year 2 and in to year 3, the students are taught crown and bridgework. This is for one session per week for 4 terms. The aims of this course are to learn the indications, contraindications, assessment and design features of crowns, inlays, veneers and bridges. They are taught the clinical and laboratory stages in producing these restorations. A basic course in occlusion is included in this period of instruction. At the successful completion of this course, assessed by formal examinations, the students can have five items of work constructed for their patients by the crown and bridge laboratory at Guy's Dental Hospital. Students must also construct a minimum of 10 items themselves in their spare time, often after 5p.m..

### **Years 3 and 4**

During years 3 and 4 the students are timetabled to attend the conservation clinic for two or three sessions per week. During this time they are allocated further patients who require routine dental care. Once a patient is allocated to a student, that student is responsible for the dental care of that patient for the whole time the student is at the dental school. The student has to carry out all necessary restorative treatment, including periodontal treatment and the provision of any removable dentures. This work is carried out in the respective departments of the dental school. The students build up a small pool of patients, their dental practice during their time at dental school. All emergency care for these patients is their responsibility. Students keep their own diary of appointments and arrange appointments and treatment as they see fit.

During years 3 and 4 the students take formal clinical tests in 4 topics after the completion of a set number of tasks in each



topic:

- 1) restoring a posterior tooth
- 2) restoring an anterior tooth
- 3) carrying out an endodontic procedure (having treated 20 canals)
- 4) crown preparation including temporary crown and impression (having completed 15 units of crownwork)

These tests are examined by two senior members of staff and the student must pass all four tests prior to taking final examinations.

At the end of year 4 the students take a formal examination in Conservative Dentistry, this will include both written and oral examinations. At this time they are also examined formally in all other aspects of clinical dentistry.

### **Year 5**

The undergraduate course has recently been extended to five years (from four years and one term) for all United Kingdom graduates. During year 5 of the course at UMDS there is no longer any specific department teaching in the restorative discipline of conservation, periodontology and prosthetics. The students continue to carry out clinical work in areas known as Polyclinics. These are areas where the students carry out any form of dental treatment in the one area with one teacher. The teacher: student ratio is 1:5. One of the polyclinic areas is away from the main Hospital and is set up as a general practice. The students work in their own surgery, with a full time nurse. They take all their own radiographs and clinical photographs. Laboratory work for crowns, bridges and dentures is carried out at commercial laboratories. The students are given a notional 1,000 pounds to spend on crown and bridgework. There is no set limit to the amount of prosthetic work they can carry out, but they must complete at least 12 cases as undergraduates. The average number of clinical sessions allocated in this way is four per week. The surgeries are linked by computers and students are taught to use computerised patient management systems.

The aim of this course in the final year is to give students sufficient range and volume of clinical experience, integrated with the associated clinical disciplines. He/she should be able to diagnose and assess restorative problems, make rational treatment plans and provide the full range of preventive measures and

restorative treatment which are normally provided by general dental practitioners. The principle of whole patient care is stressed from the first day on the clinic and is fully emphasised in the final year of the course.

Continuous assessment of the progress of students at formal meetings is held three times per year to which all members of the Faculty of Dentistry are invited to attend. The students' level of work is monitored by the students' placing all the work they do for each patient on a computer. The computer allocates a number of units for each procedure, depending on the complexity. The students must achieve 3,000 units in year 5. The quality of the work is assessed by peer review. The student group is asked to award quality points to each other depending on the quality and complexity of the work carried out by the student. Students may obtain a final report from the computer of the amount and type of work carried out in year 5 and the number of quality points awarded. This can help to choose which students are awarded jobs at the Dental Hospital on qualification.

The final examination in restorative dentistry consists of a three hour written examination, an oral examination of twenty minutes, a clinical examination involving the diagnosis of a patient problem, and the presentation of one full case treated by the student over the last three years. This case involves presenting the patient and a written presentation of the treatment provided for the patient, including photographs taken by the student. Each stage of the examination is assessed by senior external examiners appointed by the University from other dental schools of the United Kingdom.

It should not be forgotten that at all other times the student is attending other departments of the Dental School. The undergraduate dental course in the United Kingdom is a very busy five years. At the end of that time and after success in the relevant examinations, the student will qualify as Bachelor of Dental Surgery, University of London. At the end of five years the students are experienced in basic dentistry and capable of independent practice.

### **Vocational Training**

Upon qualification dental students must now take part in a one



year mandatory vocational training scheme. In this they enter into a dental practice and are payed a salary. They treat patients at the practice and one day per week attend a local centre for lectures and seminars on various topics concerned with general dental practice. This provides a more gentle introduction to dental practice maintaining the quality of the work and gradually increasing the speed of the individual. All dentists who wish to work in the National Health Service system must fulfil this training year. At the end of the year a certificate of competence is awarded.

The undergraduate dental course in the United Kingdom is tough. The fall out rate is low after the first two years. The employment rate is very high, unemployment for dentists is unknown at the present time. There are very few other professions which can boast such a situation.

## **UNIT II. DENTAL HEALTH SERVICE IN GREAT BRITAIN.**

### **STRUCTURE OF DENTAL PROFESSION**

#### **THE DENTIST**

The dentist today undergoes a period of training at a University Dental School which lasts up to six years. On passing his final examination the dental student is awarded the degree of Bachelor of Dental Surgery (B.D.S.) or the Licence in Dental Surgery (L.D.S.). But he cannot use the title of dentist or practise his profession until his name has been entered in THE DENTISTS REGISTER.

The register is kept by, the GENERAL DENTAL COUNCIL and contains the name, address and qualification of every person legally entitled to practise dentistry in the United Kingdom. Such persons may describe themselves as dentist, dental surgeon or dental practitioner. There is no difference between these titles.

The registered dentist has a wide choice of opportunities within his profession: general practice, school dental service, hospital service, university teaching and research, industrial dental service and the armed forces. He may also take additional higher qualifications and become a specialist in a particular branch of dentistry. Some examples of higher dental qualifications are

the degree of Master of Dental Surgery (M.D.S.), the Fellowship in Dental Surgery (F.D.S.), the Diploma in Orthodontics (D.Orth.) and the Diploma in Dental Public Health (D.D.P.H.).

## **GENERAL DENTAL COUNCIL**

The General Dental Council is the governing body of the dental profession and its duties are set out in the DENTISTS ACT, 1957. These duties are to promote high standards of professional education and professional conduct among dentists. It thereby ensures that the status of the profession in the community is upheld and that a proper code of conduct is maintained for the protection of the public.

In performance of these duties the General Dental Council must be satisfied that courses of study at dental schools and the qualifying examinations are adequate. It is also empowered to remove from the register any dentist who has been convicted of a criminal offence or is guilty of unprofessional conduct.

Apart from registered dentists, the only other persons permitted to undertake dental treatment are DENTAL HYGIENISTS and DENTAL AUXILIARIES. The General Dental Council is responsible for these auxiliary workers in much the same way as for dentists.

## **THE DENTAL TEAM**

A dentist's training enables him to undertake, without assistance, all of the treatment necessary for his patients, including construction of their dentures, crowns, gold inlays, etc. Except for the actual treatment performed within the mouth, however, much of the work which a dentist is qualified to do can be performed by others. For example, a DENTAL SURGERY ASSISTANT can mix filling and impression materials; a DENTAL TECHNICIAN can make dentures, crowns, gold inlays, etc; whilst dental hygienists and auxiliaries are permitted to undertake limited forms of dental treatment.

By utilizing all this assistance, a dentist becomes the captain of a team which can practise in the most efficient way. The dentist carries out all the treatment which he alone can perform, whilst the other members of the team — auxiliary, hygienist, surgery assistants and technician — perform all the work which a dentist can delegate. Compared with a single-handed dentist, the dental team can provide far more treatment each day, with



less effort and fatigue for all concerned, and thereby give a better total service to the patient and the community.

### **DENTAL AUXILIARY**

On completion of a two-year course at the training school in London, a dental auxiliary can work only in a local authority dental clinic or hospital. She is permitted to carry out the following simple treatment on children, as prescribed, in writing by a dentist and under his supervision:

1. Scaling and polishing teeth.
2. Application of fluorides to teeth.
3. Dental health education.
4. Simple fillings.
5. Extraction of deciduous teeth under local infiltration anaesthesia.

### **DENTAL AUXILIARY PERSONNEL**

Four classes of dental auxiliary are recognised in the United Kingdom: therapists, hygienists, technicians and surgery assistants. The first two categories are required by the General Dental Council, the regulatory body, to work under the supervision and to the prescription of a dental surgeon. Therapists are employed almost exclusively in the community dental service with a few working in dental hospitals. They are permitted to carry out routine conservation treatment, the extraction of deciduous teeth and prophylactic treatment. They can also give preventive instruction and advice and provide dental health education for groups. There is only one school for training dental therapists, located at New Cross in London. This has tended to create a marked regional imbalance in favour of the South East of England in their distribution and availability.

### **DENTAL HYGIENIST**

After a year's training at a dental hospital, or in the armed forces, hygienists are permitted to carry out the following dental work in a general practice, clinic or hospital:

1. Scaling and polishing teeth.
2. Application of fluorides to teeth.
3. Dental health education.

This treatment must be prescribed by a dentist and carried out under his supervision.

The majority of dental hygienists are employed in general dental practice where they are permitted to carry out the removal of plaque and calculus, provide preventive therapy, such as the application of fluoride to the teeth, and give preventive instruction and advice. Like therapists, those employed in the community service can also undertake group dental health education and organise therapeutic preventive programmes in schools. Thus they are potentially among the most important providers of preventive dentistry.

## **DENTAL TECHNICIAN**

A dental technician is a highly skilled craftsman who constructs dentures, crowns, gold inlays and orthodontic appliances, etc. He works to the dentist's prescription in a dental laboratory. Training is by means of a three-year course in a dental hospital or a five year apprenticeship in a dental laboratory.

Technicians undertake the laboratory work in the fabrication of appliances while surgery assistants, as their title implies, mainly provide chairside assistance for dentist or operating auxiliaries treating patients. Many are also capable of providing advice and instruction in the prevention of dental disease and have received formal training in these activities. The most efficient way in which dental auxiliary personnel can be utilized in group dental health education programmes is probably as resource people. In this role they can provide expert advice and assistance to health education officers, school teachers, community nursing personnel and others working actively in the field. Because of their extensive clinical training and scarcity, it is generally wasteful to employ therapists and hygienists in the direct provision of group dental health education. It has been suggested that a new class of less clinically skilled personnel could, with adequate training in communication skills, undertake dental health education more economically.



## **PART I. — THE ORGANISATION OF DENTAL SERVICES IN THE UNITED KINGDOM**

There are currently over 20,000 dentists registered in the United Kingdom. The majority work within the National Health Service, either as independent contractors or in the direct salaried employment of health authorities. Unlike the medical services, in which some 50 per cent of doctors are employed in hospitals and approximately 40 per cent in general practice, dental services are concerned largely with primary care. Thus some 80 per cent of dentists work as independent contractors in the general dental service, around 10 per cent work in the salaried community service and only 7 per cent are employed in hospitals. Hospital dentistry, though constituting an important specialist service, occupies but a small proportion of the total dental work force. The number of dentists per head of population in Britain is around 1 to 3500. This is low compared with other developed western countries. In Norway and Sweden for example the ratio is 1 to 1,000 and in West Germany and the United States 1 to 2,000.

### **GENERAL DENTAL SERVICE**

Dentists in general practice work on a fee for item of service basis and are paid for courses of treatment completed. The service is orientated toward curative and rehabilitative treatment rather than prevention. Although adult patients are entitled to have their teeth examined twice a year and children three times free of charge and are encouraged to attend regularly for early detection and treatment of disease, the inherent emphasis on providing a large amount of reparative treatment in the least possible time discourages practitioners from promoting effective prevention and offers them little reward for doing so.

In contrast to the general medical service, there are no restrictions on where dentists may practice and their lists are not closed. Patients do not therefore register with a particular practitioner but may seek a course of dental treatment wherever they can obtain it. While the NHS guarantees everyone a doctor, no one is guaranteed a dentist. Although there are regional imbalances in medical manpower, in dentistry the absence of any reg-

ulation of the location of practices has resulted in far greater imbalances than in medicine. Thus a preponderance of dentists work in the more prosperous regions so that in the affluent South East of England for example, there is one dentist for every 3000 of the population compared with one for every 5000 in the industrial North West. While almost half of all general dental practitioners work in the South East, almost two-thirds of the population live elsewhere. Adult patients are obliged to pay a contribution towards the cost of routine dental treatment with higher charges for dentures and some of the more costly items of restorative treatment. Children, expectant and nursing mothers and people receiving certain social security benefits are exempt from these contributions.

Some items such as examination and report, arrest of bleeding and domiciliary visits to the housebound are free of charge. While the cost of dental treatment in the United Kingdom is low compared with many other countries, it can be nevertheless a barrier to the receipt of care. General practitioners' contracts are held by Family Practitioner Committees of Area Health Authorities or, in Scotland, by Health Boards. They have representation on these bodies through members elected from their Local Dental Committees. A list of contractors in each area is available to the public at the offices of the Family Practitioner Committee and at local post offices.

### **COMMUNITY DENTAL SERVICE**

Dentists working in the community service are remunerated by salary. The service is organised on an area basis in clinics and health centres and is devoted exclusively to the dental care of defined priority groups. While these comprise children of all ages, expectant and nursing mothers and occasionally, handicapped adults, the major commitment of the service is to schoolchildren. Priority group patients can obtain dental treatment free under the NHS from any source, and in a typical area of the North, for example, some 80 per cent of school children receiving regular dental care are likely to obtain it from the general dental service. However, the remainder of regular patients use the community dental service the existence of which ensures that children can in fact receive some priority in access



to dental facilities. As well as providing treatment, dentists employed in the community service screen children in school for dental care needs. This case-finding activity is an additional means of encouraging patients to seek dental care for their children. Because community dental officers are not subjected to the same demanding economic pressures as their colleagues in general practice, they have more time to devote to children who are physically, mentally, socially or emotionally handicapped. They are also able, if so inclined, to balance the curative treatment they provide with appropriate prevention. As well as routine treatment services for priority group patients, specialist orthodontic treatment is available from the community dental service in most areas.

### **HOSPITAL DENTAL SERVICE**

The hospital dental service provides specialist consultant advice and treatment in oral and maxilla-facial surgery, orthodontics (including paediatric dentistry) and restorative dentistry. In addition to these consultative services, it has responsibility for the routine dental care of long stay hospital patients and the emergency treatment of short stay patients.

*Area Dental Officers and Chief Administrative Dental Officers*  
Area dental officers and CADOs (in Scotland) were established in 1974 as practising community dentists with overall responsibility for the dental services in health 'areas'. They were made accountable directly to health authorities with access to management and health care planning teams. They manage the local community dental service and have a wider coordinating and monitoring role with respect to the general and hospital dental services. They are usually ex-officio members of the area dental advisory committees, the professional advisory bodies on dental matters to the health authorities. It is through contact with general practitioners and hospital dental consultants on these committees and by cooperation with them, that they promote the overall development and improvement of dental services in the areas. The ADO has responsibility for dental health education programmes and is the main source of information on dental matters to the lay decision-makers controlling the health services of the area.

## **THE EFFECT OF DENTAL CARE ON LEVELS OF DENTAL DISEASE**

At the present time about 46 per cent of adults with some natural teeth in England and Wales attend the dentist regularly for check-ups and incremental treatment. Regular dental care maintains them for the most part free of pain and discomfort until middle age, when they tend to lose their remaining natural teeth and have them replaced by dentures. The remaining 54 per cent either never attend the dentist or seek dental care only when prompted by pain or sepsis. Their mouths often show signs of neglect and there is reason to believe that these irregular attenders lose their natural teeth on average some five years earlier than the regular attenders.

The designation of children as a priority group seems to result in their having a more favourable attendance pattern than adults. Between 60 and 75 % of schoolchildren appear to visit a dentist each year and it is useful to examine the results of dental care in these young people. The total decay experience reported in surveys of children usually shows a higher prevalence in those who attend the dentist regularly. Although these children have lower levels of untreated disease and fewer missing teeth, the difference is more than counter balanced by the number of filled teeth. This would suggest that by filling teeth, dentists are able to reduce the amount of untreated dental disease but that the dental services are not very successful in preventing teeth from decaying in the first place. It is evident that the dental services have a very efficient record in providing restorative treatment but apparently make little impact with regard to disease prevention.

## **DENTAL DISEASE AND TREATMENT IN RELATION TO THE AVAILABILITY OF CARE**

It is recognised in many fields of health care that uptake of facilities is dependent among other factors upon their availability and accessibility. In dentistry, surveys show that the receipt of regular care and the amount of restorative treatment received is closely related to the level of services. In London and the South East, with its relatively favourable dentist to population ratio, 47 per cent of people over the age of 15 years with some natural teeth are regular attenders as opposed to 42 per cent in the North where



dental facilities are scarcer. Since few people escape from the problems of dental decay, the provision of restorative treatment, the most common form of which is fillings, plays an important part in restoring the mouth to good health. In the North of England among those adults who have some teeth, the average number of teeth filled is 6.6 while in London and in the South East the figure is 8.9 teeth filled.

It is evident that the experience of restorative treatment, which is closely allied to regularity of attendance, is far greater in and around London than in the North.

One group of the population who have difficulty in obtaining dental care are the physically and mentally handicapped. It is known for example that the level of restorative treatment in severely mentally handicapped children falls below that of other children.

### **DENTAL DISEASE AND TREATMENT IN RELATION TO SOCIAL CLASS**

In the same way as the receipt of dental care is related geographically to the distribution of dentists, there are also social gradients in the amount and type of treatment received. Surveys of dental health in the United Kingdom show a tendency for the professional and managerial class to seek and receive restorative treatment while the unskilled manual class more often fail to have decayed teeth filled, allowing the disease to progress until the teeth have to be removed. Not unexpectedly, the pattern of attendance also tends to run along social class lines. The professional and managerial class form the preponderance of regular attenders while unskilled manual workers appear to be less regular in their attendance for routine dental care.

### **TREATMENT AMONG DIFFERENT CLASSES IN RELATION TO THE AVAILABILITY OF CARE**

## **PART II — AETIOLOGY AND PREVENTION OF DENTAL DISEASE**

### **THE AETIOLOGY AND PREVENTION OF DENTAL CARIES**

Dental caries is a disease resulting in the destruction of the hard tissues of the tooth beginning on the outer surfaces and progressing inwards at a variable but slow rate. It is always associated with the presence of bacteria on the tooth surface.

In order that the disease should become established it would seem that the bacteria need to colonise on areas of the tooth sheltered from the effects of mastication. This colonisation produces a film of bacteria on the surface known as dental plaque. Before the disease can progress at a significant rate the bacteria require the presence in the plaque of readily fermentable refined carbohydrate. Because ordinary dietary sugar is the most common form of refined carbohydrate eaten, this appears to be the main bacterial substrate in the aetiology of the disease.

Dental caries, therefore, results from the reaction between several forms of bacteria normally present in the mouth and dietary sugar, the two coming together in dental plaque, a film of bacteria firmly adherent to those areas of the tooth surface sheltered from the forces of mastication. The bacteria break down the sugar during their metabolism to produce acid which results in the dissolution of the tooth surface. The bacteria can also store excess sugar by turning it into polysaccharides which form part of the plaque. These polysaccharides can be broken down later to produce acids when the free sugar is no longer available.

### **DENTAL PLAQUE**

It is commonly assumed that dental decay can be reduced by removing the dental plaque and it would be expected that regular tooth-brushing, by removing plaque, would reduce dental caries. However, there is little evidence to show that this is the case. It is probable that most decay occurs on areas of the tooth surface not accessible to a toothbrush. Regular oral hygiene is important in the health of the gums and will be described later. Although toothbrushing in itself has little effect on dental decay, fluoride toothpastes have a limited but real effect. The value of a toothbrush in the fight against dental decay is, therefore, largely as an agent for applying a fluoride toothpaste to the surfaces of the teeth.

### **THE AETIOLOGY AND PREVENTION OF PERIODONTAL DISEASE**

Periodontal disease is a chronic, progressive destruction of the bone and gums supporting the teeth resulting from bacterial activity in the gingival crevice. The bacteria causing the disease remain on the surface of the teeth and gums again within



the dental plaque, but their toxic products penetrate the tissues and stimulate the inflammation that results in the destruction of the supporting tissues.

The disease begins superficially in the gums where it is called «gingivitis». This disease is reversible. Later, the disease progresses more deeply, resulting in the gradual destruction of the periodontal membrane and the bone supporting the teeth. At this stage it is called «periodontitis». Although periodontitis can be reduced or even stopped, the damage tissue can never be replaced. In the later stages a space is created between the gum and the root of the tooth called a periodontal pocket.

Even more dental plaque collects in these pockets and may form painful abscesses, frequently resulting in the extraction of the tooth. Dental plaque may take in calcium salts from the saliva and from the gingival crevicular fluid and become a hard deposit on the tooth either above (supra) or below (sub) the gingivae.

This material is called calculus or tartar. It is not harmful in itself, but it does harbour dental plaque which further inflames the tissues.

The only reliable method of reducing the speed of progress of periodontal disease is to remove the dental plaque. Fortunately, in contrast to dental caries, periodontal disease does respond to regular and thorough toothbrushing. This is probably for two reasons. First, much of the plaque causing the disease is accessible to the tooth-brush, and secondly, it seems that plaque has to be in position at the gum margin for some time before it is able to cause periodontal disease. Thus, if it is cleaned away regularly it is not given time to become established. However, to control the disease, the plaque has to be brushed off all the gum margins and this means that the brushing has to be carried out systematically and thoroughly. Unfortunately, few people know how to do this. For most people, toothbrushing is only of aesthetic and social value and does not prevent oral disease. Other factors which predispose towards periodontal disease are those which make it difficult for the patient to remove plaque effectively. Calculus on the teeth is one of these factors and should be removed periodically by a dentist or dental hygienist.

Partial dentures and orthodontic appliances (braces) that are not properly cleaned are among other factors.

### **PART III — DENTAL HEALTH EDUCATION**

#### **The Aims of Dental Health Education**

Dental health education should always be considered as part of general health education and a useful definition of the aims of health education is that proposed by the World Health Organization. This suggests that the overall approach should be to persuade people:

- to adopt and sustain healthy life practices;
- to use judiciously and wisely available health services;
- to make decisions both collectively and individually to improve their health status and environment.

This definition underlines the fact that education for health needs an integrated approach within the health services so that different disciplines will present a unified message. The reduction of dental ill-health fits very well into the framework of these aims as it can be controlled by an individual adopting the healthy life practices of sugar control and effective oral hygiene. The correct use of the dental services can aid in the control and treatment of the disease and the health of the mouth can be improved by taking steps to alter the environment, for example by implementing fluoridation of the public water supplies.

#### **HEALTH EDUCATION — INFORMAL AND FORMAL**

Health education is made up of two components, the informal and formal. They are not discrete entities as the two often occur simultaneously.

##### **INFORMAL**

This is concerned primarily with the transfer of knowledge essential for survival and the formation of important attitudes and is described by the term socialization. The family, friends and peer groups play an important part in this process. The facts transmitted on an informal basis often have no scientific validity being culturally rather than medically acceptable.

Informal health education often has profound and lasting effects and health professionals advocating changes in behav-



iour and attitude which run contrary to community expectations have a difficult task. Dietary habits, oral hygiene measures and beliefs about the causes, importance and cure of dental diseases are all part of informal dental health education. These attitudes, beliefs and behaviour are often transmitted to children long before they meet dental personnel and are usually difficult to change.

## **FORMAL**

This is the formal, planned activity organized by particular groups or professions trying to influence the behaviour of individuals, families or communities. It is that component of medicine/dentistry that bridges the gap between scientific advances and population practices. A considerable amount of formal dental health education is carried out in Britain. Unfortunately, the information given is often unrelated to current scientific knowledge and those imparting it are frequently well intentioned but set objectives which are impossible to achieve in the short term.

## **HEALTH EDUCATION INTERVENTION. PRIMARY, SECONDARY AND TERTIARY PREVENTION.**

Health education is orientated towards solving problems and its contents are therefore defined by problems existing within the population. As such, its content should be aimed at changing or refining behaviour and initiating actions conducive to preventing disease. This approach, however, needs further clarification as different approaches are required for particular populations. For any given community there will be people who are healthy, some who are at a higher than average risk to a particular disease, those who are ill and those who are recuperating. Each category requires a different health education input. Unfortunately, few health educators have been aware of the needs of the different groups and most education programmes have ignored secondary and tertiary prevention.

## **PRIMARY PREVENTION**

Information on potential health threats is given to healthy populations in order to maintain their health status and avoid risk factors. For example, dietary advice is given to mothers of very

young children even though the primary dentition has not erupted, in an effort to ensure that sensible dietary habits will result in a low caries incidence later in the child's life. Non-smokers need information on the hazards of smoking to maintain their low risk state by not taking up the habit.

## **SECONDARY PREVENTION**

Health education for the population at risk has been confused in the past with the groups requiring primary prevention. Information on risk factors does not necessarily lead to changes in behaviour and there is a need to make people aware of their higher risk to disease which is more difficult. If behaviour is to be changed all health service personnel must agree on what constitutes high risk individuals and then disseminate the facts as part of accepted medical knowledge. The Health Education Council has named three groups as being at high risk to dental disease: pre-school children, adolescents and young adults. This is because of the high incidence of disease in these people. However, there are clearly groups within these broad categories, and others not included (e.g. the handicapped) who, for a variety of reasons, could also be termed at high risk. There is a need to make the high risk status socially recognisable so that people will feel a certain social pressure judging their actions. Cigarette smoking is a particular example where secondary prevention is being practised; there are now social pressures against smoking, smokers are offered advice on how to reduce cigarette consumption and opinion formers such as the government, doctors, newspapers and television are, in the majority of cases, turning social expectations away from smoking. The dietary control of dental caries has, however, not achieved such a position. Children who consume considerable quantities of refined carbohydrate are risking a high caries attack rate and problems of besity. The need to regulate sugar intake has not yet achieved universal support from health professionals; the government is not exerting any overt pressure and advertising agencies see no need to control their advertising to children. This model indicates that education alone will not solve the problem. Community expectations must be utilized in such a way as to promote behaviour change.



## **TERTIARY PREVENTION**

This is concerned with corrective therapy in cases where the disease process is giving overt symptoms. The patient should be persuaded to adhere to the cure and rehabilitation advice should be offered so as to maintain progress. A dental example of the process is found in the treatment of advanced periodontal disease. The patient must learn to keep the mouth clean, surgery may then cure the problem areas and rehabilitation of the mouth utilizing special oral hygiene techniques may be necessary. The specialised approach required in the tertiary phase of health education has, for the most part, been ignored by the health professionals. For example, medical staff at hospitals seldom explain to patients the nature of their complaints and, once discharged, rehabilitation procedures are often poorly organised so that recovery may be delayed and relapse may occur.

## **UNIT III. DENTAL PRODUCTS AND THEIR MANAGEMENT**

### **ACRYLIC AND COMPOSITE FILLINGS**

#### *Uses of Acrylic*

Acrylic consists of a powder called POLYMER and a liquid called MONOMER. When mixed together they form a plastic mass like dough. This hardens into the set acrylic by a process called curing. Curing is effected by heating the dough in a special flask, or by adding a catalyst which allows it to cure at room temperature. These two methods of curing are known respectively as HEAT CURING and COLD CURING.

Heat cured acrylic is used for dentures, orthodontic appliances and crowns. Cold cured acrylic (also called self-cured or autopolymerized acrylic) is used for fillings, temporary restoration of fractured incisors, temporary crowns, denture repairs and impression trays.

### **COMPOSITE FILLINGS**

Composite filling materials are tooth-coloured and are used for permanent fillings in front teeth. They can also be used for filling back teeth but do not wear as well as metal fillings.

Amalgam is still a more widely used material for back teeth.

Composite fillings consist of an inorganic filler in a resin binder. The inorganic filler acts as a strengthener and may consist of powdered glass, quartz, silica or some other ceramic particles. This is incorporated into the resin binder to produce a composite filling.

The composites used for permanent restorations must contain a filler, resin binder and a catalyst. When the catalyst is activated it makes the filling set. The original composites were two-component: one containing a resin binder and filler, the other containing a catalyst. When they were mixed the filling set. This method was called a chemical-cure (self-cure) system. But now a lot of composites are light cured, the catalyst being activated by exposure to light, (e.g. Spectrum TPH). Modern composites are more resistant to masticatory wear. They are called hybrid composites.

Composites may irritate the pulp, that's why lining is required. Calcium hydroxide is a suitable lining for all these materials. The correct choice of composite shade is of great importance. They are packed in cartridges and can be easily used.

## **AMALGAMS**

### *Preparation*

Mercury is added to alloy in the proportions recommended by the manufacturers, who usually supply some form of dispenser for providing correct quantities of each. By weight, the usually recommended proportions are five parts of alloy to eight parts of mercury.

A special amalgam balance can be used to obtain this ratio if the manufacturers' own dispensers are not available. The mercury and alloy are mixed in a MORTAR by gently grinding them together with a PESTLE until a homogeneous mass of amalgam is formed. It is then transferred to a rubber thumb stall to complete the mixing. Actually the pestle and mortar are often dispensed with and either a thumb stall or mechanical amalgamator used from the start. The amalgam is then squeezed in a nap-



kin to expel globules of excess mercury. An alternative method for use with mechanical amalgamators is known as Eames' technique. Alloy and mercury are mixed in equal proportions to give a dry mix with no excess mercury to be squeezed out.

At no time must amalgam be touched by hand or contaminated with moisture in any other way. Although the hands may seem perfectly dry, moisture contamination will occur if amalgam is held in the palm of the hand. Similarly amalgam must not be contaminated with saliva during insertion of the filling.

### **JACKET CROWN**

A jacket crown is used for front teeth which are too mutilated to be restored by ordinary fillings. Such cases are very extensive caries, fracture of the crown, and severe pitting or discolouration of the crown.

The outer coating of the natural crown is removed to leave a stump, over which the artificial crown fits like a jacket. The impression is usually taken with composition in a copper ring.

Jacket crowns are made in PORCELAIN, or acrylic with a gold backing. Semi-permanent jacket crowns are made entirely of acrylic.

### **POST CROWN**

When a crown is required on a tooth which has been root filled, a post crown is generally used. The natural crown is cut off and a post fitted down the root canal. The artificial crown is made on this post

### **VENEER CROWN**

A veneer crown is a thin gold shell used in construction of bridges. On back teeth it covers the entire crown and is called a FULL CROWN. On front teeth it covers all but the labial surface and is called a THREE-QUARTER crown.

### **BRIDGES**

A bridge is a fixed replacement for one or a few missing teeth. The artificial tooth filling the gap has a gold backing which is soldered to inlays or veneer crowns on the adjacent teeth. A rubber base impression is used when making a bridge as all the teeth involved can be included in one impression.

A bridge is the ideal replacement for a missing tooth as it is permanently fixed in place and functions as well as a natural tooth. Unfortunately it is very expensive and cannot be used to replace more than a few teeth.

### **DIRECT METHOD**

The wax pattern is made by softening a piece of blue INLAY WAX over a flame, pushing it into the cavity and trimming it to shape with a WAX CARVER. It can be rather difficult and time consuming, especially if the tooth has been prepared for a very large inlay or a crown; but for single small inlays it is the quickest and most accurate method.

Before cementing the inlay, the bite is checked and any high spots removed with a carborundum stone. The edges are burnished to give a perfect marginal fit and the inlay is cemented. It is then polished with finishing burs and abrasive rubber cups or discs.

### **INDIRECT METHOD**

In difficult cases much surgery time can be saved by using the indirect method. An impression of the cavity is taken with composition or rubber base and sent to the laboratory. A model of the cavity is then made and the wax pattern is made on this model. The wax pattern is then cast in gold and polished. The advantage of the indirect method is the saving of surgery time at both visits. At the first visit time is saved by taking an impression instead of a complicated wax pattern. At the second visit, no time is spent polishing the inlay as this has already been done on the model in the laboratory.

### **COMPOSITION IMPRESSIONS**

A COPPER RING is trimmed with CROWN SCISSORS so that it just fits over the inlay cavity. Some composition is softened in a flame, inserted in the copper ring, and an impression taken of the cavity. It hardens in a few minutes and the copper ring is withdrawn from the tooth. A wax squash bite is then taken. A lit-



the petroleum jelly is smeared over the softened composition just before the impression is taken. This facilitates removal of the impression from the tooth. As soon as the copper ring impression is withdrawn from the tooth, it is chilled under cold running water to harden it completely and prevent any damage before the model is made. Advantages of composition are that it requires no preparation and is quick and simple to use. The disadvantage is that it distorts or fractures on removal from undercut areas; and only gives an impression of one tooth.

## **RUBBER BASE IMPRESSIONS**

Rubber base materials are generally supplied in tubes, the contents being squeezed out and prepared for use according to the manufacturer's instructions. In the mouth they set into a solid rubbery consistency. There are two different types: the POLYSULPHIDE rubbers and the SILICONE rubbers, . Before the impression is taken, the gum must be pushed away from the cavity margin to keep it dry and permit a good impression. This is done by packing the gum margin with a piece of string soaked in an astringent, such as 7 per cent zinc chloride. The string is then removed and some rubber base injected into the floor of the cavity from a syringe. The main body of impression material is then inserted over the cavity and adjacent teeth in an impression tray. Setting time is at least five minutes, being rather longer for the polysulphide than the silicone rubbers. A perforated tray, painted inside with a rubber adhesive, is usually used. A wax squash bite is then taken.

The advantage of rubber base is its elasticity. This ensures an accurate undistorted impression of undercut areas and allows several cavities to be included in one impression.

Disadvantages are: the elaborate technique required; long setting time; expense; and, in the case of polysulphide rubbers, the unpleasant smell and sticky consistency before setting.

## **ADVANTAGES OF GOLD**

The advantages of gold inlays lie in their great strength, which is far superior to that of amalgam. Consequently much less tooth substance need be drilled away for gold than for amalgam fill-

ings. Gold can also be used for crowns where it does not show.

#### DISADVANTAGES

Disadvantages are the extra time and expense involved and, like amalgam, its unsuitability for front teeth where it would show.

### **GUTTA-PERCHA**

#### PREPARATION

Gutta-percha is supplied in pink or white sticks which are softened over a flame and a portion inserted in the cavity, Once in the cavity it hardens very quickly and can be smoothed over with cotton wool soaked in a solvent such CHLOROFORM or OIL OF CAJUPUT. Petroleum jelly smeared on the fingers will prevent gutta-percha sticking to them.

#### USES

It is used mainly as a temporary filling between visits for gold inlays. However, it is also used extensively in the form of ready-made points for root canal fillings. Apart from fillings it is sometimes used to test the response of a tooth to heat, by placing some hot gutta-percha against the crown.

BLACK GUTTA-PERCHA is used to form a soft lining for GUNNINO SPLINTS in the treatment of jaw fractures; and as a temporary plug or OBTURATOR for cleft palates and cyst cavities.

#### ADVANTAGES

Advantages of gutta-percha are that it requires no mixing; hardens immediately; and can be painlessly removed from a cavity with a warmed excavator, without any need for drilling.

#### DISADVANTAGES

It is too soft to withstand a heavy bite, and decomposes if left in a cavity too long.

### **THE TOOTH, THE WHOLE TOOTH AND NOTHING BUT THE TOOTH**

Some well-known saying (it doesn't make much difference what) is proved by the fact that everyone likes to talk about his experiences at the dentist's. For years and years little articles like



this have been written on the subject, little jokes like some that I shall presently make have been made, and people in general have been telling other people just what emotions they experience when they crawl into the old red plush guillotine. They like to explain to each other how they feel when the dentist puts «that buzzer thing» against their bicuspid, and, if sufficiently pressed, they will describe their sensations on mouthing a rubber dam. «I'll tell you what I hate,» they will say with great relish, «when he takes that little nut-pick and begins to scrape. Ugh!»



«Oh, I'll tell you what is worse than that,» says the friend, not to be outdone, «when he is poking around careless-like, and strikes a nerve. Wow!» And if there are more than two people at the experience meeting, everyone will chip in and tell what he or she considers to be the worst phase of the dentist's work, all present enjoying the narration hugely and none so much as the narrator who has suffered so. This sort of thing has been going on ever since the first mammoth gold tooth was hung out as a bait to folks in search of a good time. (By the way, when did the present obnoxious system of dentistry begin? It can't be so very long ago that the electric auger was invented, and where would a dentist be without an electric auger? Yet you never hear of Amalgam Filling Day, or any other anniversary in the dental year. There must be a conspiracy of silence on the part of the trade to keep hidden the names of the men who are responsible for all this.)

However many years it may be that dentists have been plying their trade, in all that time people have never tired of talking about their teeth. This is probably due to the inscrutable workings of Nature who is always supplying new teeth to talk about.

As a matter of fact, the actual time and suffering in the chair is only a fraction of the whole affair. That preliminary period, about which nobody talks, is much the worse. This dates from the discovery of the wayward tooth and extends to the moment when the dentist places his foot on the automatic hoist which jacks you up into range. Giving gas for tooth extraction is all very humane in its way, but the time for anaesthetics is when the patient first

decides that he must go to the dentist.

There is probably no moment more appalling than that in which the tongue, running idly over the teeth in a moment of care-free play, comes suddenly upon the ragged edge of space from which the old familiar filling has disappeared. The world stops and you look meditatively up to the corner of the ceiling. Then quickly you draw your tongue away, and try to laugh the affair off, saying to yourself:

«Stuff and nonsense, my good fellow! There is nothing the matter with your tooth. Your nerves are upset after a hard day's work, that's all.»

Having decided this to your satisfaction, you slyly, and with a poor attempt at being casual, slide the tongue back along the line of adjacent teeth, hoping against hope that it will reach the end without mishap.

But there it is! There can be no doubt about it this time. The tooth simply has got to be filled by someone, and the only person who can fill it with anything permanent is a dentist. You wonder if you might not be able to patch it up yourself for the time being, - a year or so - perhaps with a little spruce-gum and a coating of new-skin. It is fairly far back, and wouldn't have to be a very sightly job.

But this has an impracticable sound, even to you. You might want to eat some peanut-brittle (you never can tell when someone might offer you peanut-brittle these days), and the new-skin, while serviceable enough in the case of cream soups and custards, couldn't be expected to stand up under heavy crunching.

So you admit that, since the thing has got to be filled, it might as well be a dentist who does the job.

This much decided, all that is necessary is to call him up and make an appointment.

Let us say that this resolve is made on Tuesday. That afternoon you start to look up the dentist's number in the telephone-book. A great wave of relief sweeps over you when you discover that it isn't there. How can you be expected to make an appointment with a man who hasn't got a telephone? And how can you have a tooth filled without making an appointment? The whole thing is impossible, and that's all there is to it. God knows you did your best.

On Wednesday there is a slightly more insistent twinge, owing to



bad management of a sip of ice-water. You decide that you simply must get in touch with that dentist when you get back from lunch. But you know how those things are. First one thing and then another came up, and a man came in from Providence who had to be shown around the office, and by the time you had a minute to yourself it was five o'clock. And, anyway, the tooth didn't bother you again. You wouldn't be surprised if, by being careful, you could get along with it as it is until the end of the week when you will have more time. A man has to think of his business, after all, and what is a little personal discomfort in the shape of an unfilled tooth to the satisfaction of work well done in the office?

By Saturday morning you are fairly reconciled to going ahead, but it is only a half day and probably he has no appointments left, anyway. Monday is really the time. You can begin the week afresh. After all, Monday is really the logical day to start in going to the dentist.

Bright and early Monday morning you make another try at the telephone-book, and find, to your horror, that some time between now and last Tuesday the dentist's name and number have been inserted into the directory. There it is. There is no getting around it: «Burgess, Jas. Kendal, D.D.S.» ... Courtland-2654.» There is really nothing left to do but to call him up. Fortunately the line is busy, which gives you a perfectly good excuse for putting it over until Tuesday. But on Tuesday luck is against you and you get a clear connection with the doctor himself. An appointment is arranged for Thursday afternoon at 3: 30.

Thursday afternoon, and here it is only Tuesday morning! Almost anything may happen between now and then. We might declare war on Mexico, and off you'd have to go, dentist appointment or no dentist appointment. Surely a man couldn't let a date to have a tooth filled stand in the way of his doing his duty to his country. Or the social revolution might start on Wednesday, and by Thursday the whole town might be in ashes. You can picture yourself standing, Thursday afternoon at 3:30, on the ruins on the City Hall and saying to yourself, with a sigh of relief: «Only to think! At this time I was to have been climbing into the dentist's chair!» You never can tell when your luck will turn in a thing like that.

But Wednesday goes by and nothing happens. And Thursday morning dawns without even a word from the dentist saying that

he has been called suddenly out of town to lecture before the Incisor Club. Apparently, everything is working against you.

By this time, your tongue has taken up a permanent resting-place in the vacant tooth, and is causing you to talk indistinctly and incoherently. Somehow you feel that if the dentist opens your mouth and finds the tip of your tongue in the tooth, he will be deceived and go away without doing anything.

The only thing left is for you to call him up and say 'that you have just killed a man and are being arrested and can't possibly keep your appointment. But any dentist would see through that. He would laugh right into his transmitter at you. There is probably no excuse which it would be possible to invent which a dentist has not already heard eighty or ninety times. No, you might as well see the thing through now.

Luncheon is a ghastly rite. The whole left side of your jaw has suddenly developed an acute sensitiveness and the disaffection has spread to the four teeth on either side of the original one. You doubt if it will be possible for him to touch it at all. Perhaps all he intends to do this time is to look at it anyway. You might even suggest that to him. You could very easily come in again soon and have him do the actual work.

Three-thirty draws near. A horrible time of day at best. Just when a man's vitality is lowest. Before stepping in out of the sunlight into the building in which the dental parlor is, you take one look about you at the happy people scurrying by in the street. Carefree children that they are! What do they know of Life? Probably that man in the silly-looking hat never had trouble with so much as his baby-teeth. There they go, pushing and jostling each other, just as if within ten feet of them there was not a man who stands on the brink of the Great Misadventure. Ah well! Life is like that!

Into the elevator. The last hope is gone. The door clangs and you look hopelessly about you at the stupid faces of your fellow passengers. How can people be so clownish? Of course, there is always the chance that the elevator will fall and that you will all be terribly hurt. But that is too much to expect. You dismiss it from your thoughts as too impractical, too visionary. Things don't work out as happily as that in real life.

You feel a certain glow of heroic pride when you tell the operator the right floor number. You might just as easily have told him a floor too high or too low, and that would, at least, have caused delay. But



after all, a man must prove himself a man and the least you can do is to meet Fate with an unflinching eye and give the right floor number.

Too often has the scene in the dentist's waiting room been described for me to try to do it again here. They are all alike. The antiseptic smell, the ominous hum from the operating-rooms, the ancient Digests, and the silent, sullen group of waiting patients, each trying to look unconcerned and cordially disliking everyone else in the room, - all these have been sung by poets of far greater lyric powers than mine. (Not that I really think that they are greater than mine, but that's the customary form of excuse for not writing something you haven't got time or space to do. As a matter of fact, I think I- could do it much better than it has ever been done before.)

I can only say that, as you sit looking, with unseeing eyes, through a large book entitled «The War in Pictures», you would gladly change places with the most lowly of God's creatures. It is inconceivable that there should be anyone worse off than you, unless perhaps it is some of the poor wretches who are waiting with you.

That one over in the arm-chair, nervously tearing to shreds a copy of «The Dental Review and Practical Inlay Worker.» She may have something frightful the trouble with her. She couldn't possibly look more worried. Perhaps it is very, very painful. Thus thought cheers you up considerably. What cowards women are in times like these!

And then there comes the sound of voices from the next room.

All right, Doctor, and if it gives me any more pain shall I call you up? Do you think that it will bleed much more? Saturday morning, then, at eleven "Good-bye, doctor.»

And a middle-aged woman emerges (all women are middle-aged when emerging from the dentist's office). A wisp of hair waves dissolutely across her forehead between her eyes. Her face is pale, except for a slight inflammation at the corners of her mouth and in her eyes is that far-away look of one who has been face to face with Life. But she is through. She should care how she looks.

The nurse appears, and looks inquiringly at each one in the room. Each one in the room evades the nurses's glance in one last, futile attempt to fool someone and get away without seeing the dentist. But she spots you and nods pleasantly. God, how pleasantly she nods! There ought to be a law against people being as pleasant as that.

«The doctor will see you now,» she says. The English language

may hold a more disagreeable combination of words than «The doctor will see you now.» I am willing to concede something to the phrase «Have you anything to say before the current is turned on.» That may be worse for the moment, but it doesn't last so long. For continued, unmitigating depression, I know nothing to equal «The doctor will see you now.» But I'm not narrow-minded about it. I'm willing to consider other possibilities.

Smiling feebly, you trip over the extended feet of the man next to you, and stagger into the delivery-room, where amid a ghastly array of death-masks of teeth, blue flames waving eerily from Bunsen burners, and the drowning sound of perpetually running water which chokes and gurgles at intervals, you sink into the chair and close your eyes.

But now let us consider the spiritual exaltation that comes when you are at last let down and turned loose. It is all over, and what did it amount to? Why, nothing at all. A-ha-ha-ha-ha-ha! Nothing at all. You suddenly develop a particular friendship for the dentist. A splendid fellow, really. You ask him questions about his instruments. What does he use this thing for, for instance? Well, well, to think of a little thing like that making all that trouble. A-ha-ha-ha-haha! And the dentist's family, how are they? Isn't that fine!

Gaily you shake hands with him and straighten your tie. Forgotten is the fact that you have another appointment with him for Monday. There is no such thing as Monday. You are through for today, and all' right with the world.

As you pass out through the waiting-room, you leer at the others unpleasantly. The poor fishes! Why can't they take their medicine like grown people and not sit there moping as if they were going to be shot?

Heigh-ho! Here's the elevator-man! A charming fellow! You wonder if he knows that you have just had a tooth filled. You feel tempted to tell him and slap him on the back. You feel tempted to tell everyone out in the bright, cheery street. And what a wonderful street it is too! All full of nice, black snow and water. After all. Life is sweet!

And then you go and find the first person whom you can accost without being arrested and explain to him just what it was that the dentist did to you, and how you felt, and what you have got to have done next time.

Which brings us right back to where we were in the beginning, and perhaps accounts for everyone's liking to divulge their dental secrets to others. It may be a sort of hysterical relief that, for the time being it is all over with.



# КОРОТКИЙ ДОВІДНИК

## PRONUNCIATION GUIDE

### (КОРОТКИЙ ДОВІДНИК З ПРАВИЛ ЧИТАННЯ)

#### VOWELS AND DIPHTHONGS

##### (ГОЛОСНІ ТА ДИФТОНГИ)

1. [i:]	see tea	[si:] [ti:]	11. [ə:]	girl term fur byrd	[gə:l] [tə:m] [fə:] [bə:d]
2. [ɪ]	sit system	[sit] [ˈsɪstɪm]	12. [ə]	ago a book	[əˈɡoʊ] [əˈbʊk]
3. [e]	ten met	[ten] [met]	13. [eɪ]	name pain day	[neɪm] [peɪn] [deɪ]
4. [æ]	hat sat	[hæt] [sæt]	14. [oʊ]	home boat	[hoʊm] [boʊt]
5. [ɑ:]	arm park	[ɑ:m] [pɑ:k]	15. [aɪ]	five sky	[faɪv] [skaɪ]
6. [ɒ]	not want	[nɒt] [wɒnt]	16. [aʊ]	now	[naʊ]
7. [ɔ:]	fork saw all	[fɔ:k] [sɔ:] [ɔ:l]	17. [ɔɪ]	boy join	[bɔɪ] [dʒɔɪn]
8. [u]	book put	[bʊk] [put]	18. [ɪə]	near here	[nɪə] [hɪə]
9. [u:]	too	[tu:]	19. [eə]	hair there	[heə] [ðeə]
10. [ʌ]	cup	[kʌp]	20. [ʊə]	pure during	[pjʊə] [ˈdʒʊərɪŋ]

#### CONSONANTS

##### (ПРИГОЛОСНІ)

1. [p]	pen	[pen]	8. [s]	cell so	[sel] [sou]
2. [b]	bad	[bæd]	9. [z]	zoo	[zu:]
3. [t]	tea	[ti:]	10. [ʃ]	she	[ʃi:]
4. [d]	did	[dɪd]	11. [ʒ]	vision	[ˈvɪʒn]
5. [k]	cat Kate back	[kæt] [keɪt] [bæk]	12. [h]	how	[haʊ]
6. [g]	get	[get]	13. [m]	man	[mæn]
7. [tʃ]	chin match	[tʃɪn] [mætʃ]	14. [n]	no	[noʊ]

15. [dʒ]	page	[peɪdʒ]	20. [ŋ]	sing	[sɪŋ]
16. [f]	fall	[fɔ:l]	21. [l]	leg	[leg]
17. [v]	voice	[vɔɪs]	22. [r]	red	[red]
18. [θ]	thin	[θɪn]	23. [j]	yes	[jes]
19. [ð]	this	[ðɪs]	24. [w]	week	[wi:k]

### ЧИТАННЯ ДЕЯКИХ ПРИГЛОСНИХ

C c	перед <b>e, i, y</b> — [s]: pencil, ice, cent
	решта випадків [k]: come, cup, black
G g	перед <b>e, i, y</b> — [i]: page, gin, gem
	решта випадків [g]: game, good, green
X x	перед приголосними та в кінці слів [ks]: text, six
	перед наголошеним голосним [gz]: exam, exact

### ЧИТАННЯ ГОЛОСНИХ В ОСНОВНИХ ТИПАХ НАГОЛОШЕНИХ СКЛАДІВ

Vowels	a [eɪ]	o [ou]	e [i:]	i [aɪ]	y [waɪ]	u [ju:]
I	[eɪ] name	[ou] note	[i:] be	[aɪ] fine	my	[ju:] tune
II	[æ] map	[ɔ] not	[e] bell	[ɪ] sit	myth	[ʌ] cup
III	[ɑ:] park	[ɔ:] fork	term	firm	[ə:] byrd	turn
IV	[ɛə] care	[ɔ:] more	[ɪə] here	[aɪə] fire	tyre	[juə] during

### ЧИТАННЯ БУКВЕНИХ ПОЄДНАНЬ

#### 1. Vowels (Голосні)

ai ay	[eɪ]	rain	day	ea ee	[i:]	sea	meet
ew	[ju:]	new					
oi oy	[ɔɪ]	point	boy	ou ow	[aʊ]	out	brown
ai + r	[ɛə]	pair					
ou + r	[aʊə]	our					
ee + r	[ɪə]	engineer					
oo + r	[ɔ:]	door					



## 2. Consonants (Приголосні)

th	[ð]	this, bathe	sh	[ʃ]	she, ship
	[θ]	theme, thumb	ng	[ŋ]	long, sing
ch	[tʃ]	chess, chair	ck	[k]	black
tch		match	qu	[kw]	quick write,
			wr	[r]	wrong
wh	[w]	what, why			
	[h]	who, whose			

## 3. Vowels – Consonants (Голосні – Приголосні)

al	[ɔ:]	chalk	wor	[wə:]	work, word
		all			
wa	[wɔ]	want	igh	[aɪ]	light
war	[wɔ:]	war, warm			night

## Читання чисел

### 1. Vulgar Fractions (Прості дроби)

**1/8** an/one eighth

[ən/wʌnˈeɪtθ]

**1/4** a/one quarter

[ə/wʌnˈkwɔ:tə]

**1/3** a/one third

[ə/wʌnˈθɜ:d]

**1/2** a/one half

[ə/wʌnˈha:f]

**3/4** three quarters

[θri:ˈkwɔ:təz]

### Decimal Fractions (Десяткові дроби)

**0.125** (nought) point one two five

[nɔ:t pɔɪntɪ wʌn tu:ˈfaɪv]

**0.25** (nought) point two five

[nɔ:t pɔɪnt tu:ˈfaɪv]

**0.33** (nought) point three three

**0.5** (nought) point five

**0.75** (nought) point seven five

## 2. Dates (Дати)

**2000 BC** two thousand [bi:ˈsi:]

— ... до нашої ери

**55 BC** fifty-five [bi:ˈsi:]

**AD 55** [eɪˈdi:] fifty-five

— ... нашої ери

**3(rd) January 1985:** the third of January nineteen eighty-five

## 3. Telephone numbers (Номери телефонів)

**66038** «double six oh three eight»

## КОРОТКИЙ ДОВІДНИК З ПРАВИЛ СЛОВОТВОРЕННЯ

В англійській мові нові слова утворюються так:

1. Складанням слів, наприклад:

head [hed] — голова + ache[eik] — біль = headache —  
головний біль.

У складних словах наголошується перший елемент, наприклад:

headache [ˈhedeik].

2. Афіксацією, тобто за допомогою суфіксів та префіксів.

За допомогою суфіксів **-er, -or** утворюються іменники на позначення  
дійової особи чи професії:

to found [faund] — засновувати; founder [ˈfaundə] — засновник.

Префікс **re-** означає повторення дії:

rewrite [riːraɪt] — переписати;

зворотну дію:

to act — діяти; to react [riːˈækt] — протидіяти,  
чинити опір.

Суфікси і префікси, як правило, ненаголошені: founder [ˈfaundə].

3. Конверсією (форми слів різних частин мови, котрі збігаються):

to work — працювати; work — робота; to help — допомагати;

the help — допомога.

4. Перший з двох посліпль іменників може мати властивість означення. На  
українську мову перекладається як прикметник чи іменник родового від-  
мінка:

institute library — бібліотека інституту або інститутська бібліотека.

### Основні суфікси.

Суфікси іменників: **-age, -ance(ence), -ancy(ency), -er(or), -ian, -ing, -ion, -(i)ty, -ist, -ment, -ness, -th, -ure, -y.**

Суфікси прикметників: **-able(ible), -al, -ant(ent), -ar, -ary(ory, ery), -ful, -ian, -ic(al), -ing, -ish, -ive, -less, -ous, -y.**

Суфікси числівників: **-th, -teen, -ty.**

Суфікси прислівників: **-ly.**

Суфікси дієслів: **-ate, -ize(ise), -y, -en, -fy.**

Основні префікси: **a-, ab-, be-, com-, con-, de-, dis-, ex-, il-, im-, in-, inter-, intra-, ir-, over-, per-, pre-, re-, sub-, un-.**

### Префікси із заперечувальним значенням

<b>un-</b>	uncomfortable unlock	незручний відмикати
<b>in-</b>	indirect	непрямий
<b>il-</b>	illogical	нелогічний
<b>ir-</b>	irregular	нерегулярний
<b>im-</b>	impossible	неможливий
<b>dis-</b>	dislike dishonest	не любити нечесний
<b>mis-</b>	misunderstand	неправильно зрозуміти



## Префікси з різним значенням

<b>re-</b>	rewrite	переписати
<b>over-</b>	overwork	перетрудитися
<b>under-</b>	underpay	низько оплачувати
<b>post-</b>	postwar	повоєнний
<b>pre-</b>	pre-war	довоєнний
<b>counter-</b>	counteraction	протидія
<b>ex-</b>	ex-minister	колишній міністр

## PRACTICAL GRAMMAR GUIDE (КОРОТКИЙ ГРАМАТИЧНИЙ ДОВІДНИК)

### I. Артиклі та іменник

Артиклі: неозначений (**a/an**) та означений (**the**) входять до так званої групи «визначників» іменника:

1.

Give me	a the this/that his/her John's some/any	pen
Give me	the these/those some/any a few a lot of John's	pens

Give me **a** pen.      Тут йдеться про яку-небудь ручку, про ручку,  
There's **a** pen.      а не якийсь інший предмет.

Give me **the** pen.      У цьому випадку йдеться про цілком певну ручку  
There's **the** pen.      (той, хто слухає/говорить знає, про яку ручку йдеться).

**! an = a** (перед словом, що починається на голосний:  
**an apple, an idea**)

2. Неозначений артикль **не вживається** з іменниками у множині, а також з незлічуваними іменниками:

іменники	a/an	the	no article
злічувані в однині	a tree an apple	the tree the apple	- -
злічувані у множині	- -	the trees the apples	trees apples
незлічувані	-	the water the sugar (мається на увазі певна кількість)	water sugar

3. Незлічувані іменники **news, advice, weather, progress, information, luggage** з неозначеним артиклем **a** не вживаються.

Це приємні новини (слухна порада). This is welcome news (advice).  
Яка чудова/погана погода! What good/nasty weather!

Зверніть увагу, як виражається значення злічуваності з іменниками, коли той, хто говорить, має потребу це підкреслити:

Ось одна цікава новина (інформація). Here is an interesting item (piece) of news (information).  
Дайте мені, принаймні, хоч одну пораду. Give me a bit (word) of advice.  
Скільки у вас місць багажу? How many pieces of luggage have you got?

4. З деякими географічними назвами вживається означений артикль **the**.

готелі	the Europa Hotel, the Ambassador Hotel
судна	the Queen Elizabeth, the Titanic
канали	the Suez
річки	the Dniپر River, the Thames
моря, океани	the Black Sea, the Pacific Ocean
групи островів	the Canaries (Canary Islands)
групи гір	the Alps, the Caucasus (Mountains)
країни, області, що становлять групове поняття	the United Kingdom, the United States Great Britain, America

Артикль **the** не вживається у таких випадках:

імена людей (клички тварин)	Mary, John Carlston, Spot
міста, вулиці, майдани, вокзали	Atlantic City, London, Kreshchatik Street, Trafalgar Square, Times Square, Victoria Station, University Station
озера, окремі острови чи гори	Lake Baikal, Loch Lomond, Everest, Ben Nevis, Montblanc, Elba
материки	Asia, Australia, Africa, South/North America

5. Порівняйте:

Shevchenko's birthplace (без артикля) the Shevchenko museum (з артиклем)  
місце народження Шевченка музей Шевченка  
Tolstoy's library the Tolstoy library  
бібліотека, котра належала Толстому бібліотека імені Толстого

6. У деяких висловах артикль відсутній:

at/before/after	♦ breakfast, dinner, etc.
before/after	♦ classes, work
according	♦ to plan/schedule
behind/ahead	♦ of plan/schedule
by train/bus/plane, etc.	♦ to be in (out of) order
to travel first/tourist class	♦ to be in (out of) town



### III. NONE (SOME, ALL, ETC.) OF...

#### Countables (Злічувані)

<b>Some</b> <b>None</b> <b>Both</b> <b>Several</b> <b>Two or Three</b> <b>(Very) Few</b> <b>A few</b> <b>A large number</b> <b>A lot</b> <b>(How) Many All</b>	of	them these those mine(yours, etc.) John's	are interesting
		the these those my (your, etc.) John's	books were sold

#### Uncountables (незлічувані)

<b>Some</b> <b>None</b>  <b>A great deal</b> <b>A good deal</b>  <b>A (little), a lot</b>  <b>(How) much</b> <b>All</b>	of	it this that  ours (yours, etc.)	is cheap.
		the this, that this country's	oil is sold

## ОЗНАКИ РОЗПІЗНАВАННЯ ЧАСУ ТА ВИДУ ДІЄСЛІВ

### Час групи Indefinite

#### Present Indefinite.

Ознаки:

- дієслово у формі інфінітива без частки **to**;
- посідає друге місце у реченні (після підмета);
- у 3-й особі однини має суфікс **-s**.

Значення форми:

виражає дію, що стосується теперішнього часу незалежно від її перебігу.

Зазначення еквіваленту:

в українській мові відповідає дієслову теперішнього часу як доконаного, так і недоконаного виду

---

Pr. Ind. = S + V (+ s) (у 3-й ос. одн.)

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## Past Indefinite.

*Ознаки:*

1. дієслово з суфіксом **-ed** або неправильне дієслово II форми;
2. посідає друге місце у реченні (після підмета).

*Значення форми:*

виражає дію, що відбулася в минулому, і з теперішнім не зв'язану.

*Зазначення еквіваленту:*

в українській мові відповідає дієслову минулого часу як доконаного, так і недоконаного виду.

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$$\text{P. Ind.} = \text{S} + \text{V} \begin{cases} \text{ed} \\ \text{en} \end{cases} \quad (\text{II})$$

---

## Future Indefinite.

*Ознака:*

допоміжне дієслово **shall** (для 1-ї особи) або **will** (для решти осіб) + інфінітив без частки **to**.

*Значення форми:*

виражає дію, котра відбудеться в майбутньому.

*Зазначення еквіваленту:*

в українській мові відповідає дієслову майбутнього часу як доконаного, так і недоконаного виду.

---

$$\text{F. Ind.} = \text{S} + \text{shall (will)} + \text{V}$$

---

## Час групи Continious

### Present Continious.

*Ознака:*

дієслово **to be** у Present Indefinite + дієприкметник I.

*Значення форми:*

виражає дію теперішнього часу під час здійснення, розвитку.

*Зазначення еквіваленту:*

в українській мові відповідає дієслову теперішнього часу недоконаного виду.

---

$$\text{Pr. Cont.} = \text{S} + \text{am (are, is)} + \text{V-ing (IV)}$$

---

### Past Continious.

*Ознака:*

допоміжне дієслово **to be** у Past Indefinite + дієприкметник I.

*Значення форми:*

виражає дію минулого часу під час розвитку, здійснення.

*Зазначення еквіваленту:*

в українській мові відповідає дієслову минулого часу недоконаного виду.

---

$$\text{P. Cont.} = \text{S} + \text{was (were)} + \text{V-ing (IV)}$$

---



## Час групи Perfect

### Present Perfect.

Ознака:

дієслово **to have** у Present Indefinite + дієприкметник II.

Значення форми:

виражає дію, яка відбулась до моменту мовлення, і той, хто говорить, має на увазі результат цієї минулої дії, її важливість на момент мовлення.

Зазначення еквіваленту:

в українській мові відповідає дієслову минулого часу доконаного виду.

---

$$\text{Pr. Perf.} = S + \text{have (has)} + V \begin{cases} \text{ed} \\ \text{en} \end{cases} \quad (\text{III})$$

---

### Past Perfect.

Ознака:

дієслово **to have** у Past Indefinite + дієприкметник II.

Значення форми:

виражає дію, яка відбулась до певного моменту чи іншу дію в минулому.

Зазначення еквіваленту:

в українській мові відповідає дієслову минулого часу доконаного виду.

---

$$\text{P. Perfect} = S + \text{had} + V \begin{cases} \text{ed} \\ \text{en} \end{cases} \quad (\text{III})$$

---

## Ознаки функціональної різниці дієслова **to be**

Функції	Ознаки форми	Еквіваленти в українській мові
1. Змістове дієслово	1) за ним іде іменник з прийменником або прислівник місця.	My friend <b>is</b> at the laboratory. I <b>was</b> there yesterday.
		Перекладається: «бути», «перебувати»; у теперішньому часі часто випускається
	2) після слова <b>there</b> , перед іменником без прийменника	There are many wards in this clinic. Перекладається: «мати, перебувати». Якщо є обставина місця і часу, то переклад має починатися з них.

2. Дієслово-зв'язка	<p>1) перед іменником прийменника (за винятком без прийменника of), прикметником або числівником</p> <p>2) після підмета-іменника типу aim, plan, function, purpose, task, etc., перед герундієм або інфінітивом</p>	<p>He <b>is</b> a student.</p> <p>The results of the treatment <b>were</b> satisfactory.</p> <p>They <b>are</b> 15 students in the group.</p> <p>Перекладається: «бути, становити»; у теперішньому часі часто випускається.</p> <p>Our task is preventing many diseases.</p> <p>Перекладається: «полягати»; у теперішньому часі часто випускається.</p>
3. допоміжне дієслово	<p>1) перед ing-form (IV)</p> <p>2) перед Participle II</p>	<p>The students <b>are</b> listening to the lecture.</p> <p>На українську мову не перекладається.</p> <p>They <b>were</b> invited by their teacher.</p> <p>На українську мову не перекладається.</p>
4. У модальному значенні	1) перед інфінітивом	<p>He <b>is</b> to go there.</p> <p>Виражає те, що повинне бути.</p>

### Ознаки функціональної різниці дієслова *to have*

Функції	Ознаки	Еквіваленти в українській мові
1. змістове дієслово	перед іменником (часто з означеннями)	<p>He <b>has</b> a lot of medical books.</p> <p>Перекладається: Він має ...</p>
2. допоміжне дієслово	перед Participle II	<p>I <b>have</b> read this book.</p> <p>He <b>has</b> been working here for 10 years.</p> <p>На українську мову не перекладається.</p>
3. у модальному значенні	перед інфінітивом	<p>You will <b>have</b> to repeat it.</p> <p>Виражає те, що повинне бути внаслідок дії дієслова-інфінітива.</p>



## Ознаки розпізнавання граматичних форм, утворених за допомогою допоміжних дієслів *should* і *would*

Функції	Ознаки	Еквіваленти в українській мові
1. Допоміжне дієслово	Входить до складу присудка підрядного речення, а присудок головного речення має одну з форм минулого часу.	Присудок перекладається майбутнім часом.
a) Future in the Past	The surgeon said that he <b>would consult</b> this patient in two days.	Хірург сказав, що він проконсультує хворого через 2 дні.
b) Subjunctive Mood	1. Входить до складу присудка головного речення, де підрядне є умовним:	Присудок перекладається минулим часом з часткою «б», «би».
	If there were no calcium salts producing a barrier, the caries <b>would go</b> straight to the pulp.	Якби не було кальцієвих солей, що створюють бар'єр, карієс перейшов би на пульпу.
	2. Входить до складу присудка умовного підрядного речення: <b>Should</b> this condition <b>arise</b> the drug should be administered intravenously.	Якби стан погіршився, то ліки треба було б вводити внутрішньовенно.
	3. Входить до складу присудка підрядного речення з виразами (безособовими або такими, що виражають вимогу, наказ чи пропозицію, конструкціями):	Під час перекладу вживається сполучник «щоб».
	It is necessary that the root <b>should be resected</b> . The doctor suggested that the patient <b>should be operated on</b> .	Необхідно, щоб корінь був щоб видалений. Лікар наполягав, щоб пацієнт був прооперований.
2. Модальне дієслово	Входить до складу присудка простого чи головного речення:	Виражає необхідність, пораду, докір тощо. Перекладається: «варто (повинен)» або «варто було б (повинен би)».
	The teeth <b>should be</b> carefully and regularly inspected. The area <b>should be</b> X-rayed before the treatment begins,	Зуби варто ретельно і регулярно перевіряти. Варто було б зробити рентгенівський знімок перед тим, як розпочати лікування.

## Ознаки розпізнавання *ing*-форми

Ознаки	Форми		
	Participle I	Gerund	Verbal Noun
а) <i>формальні</i>			
1) наявність артикля	-	-	+
2) показник множини	-	-	+
3) часові та станові форми	+	+	-
4) наявність означення	-	-	+
5) наявність обставини	+	+	-
6) наявність попереднього прийменника	-	+	-
б) <i>функціональні</i>			
1) підмет	-	+	+
2) частина простого присудка	+	-	-
3) частина дієслівного присудка	-	+	-
4) частина іменного присудка	-	+	-
5) означення	+	-	-
6) обставина	+	+	-
7) прямий додаток	-	+	+
8) непрямий додаток	-	+	+

### Зазначення еквівалентів в українській мові:

- Participle I:*
- дієприкметник;
  - дієприкметникові звороти;
  - дієприслівники;
  - дієприслівникові звороти
- Gerund:*
- віддієслівний іменник
  - інфінітив

*Verbal Noun:* віддієслівний іменник



## Pronouns (Займенники)

1	Відповідають на питання хто? Who is doing this? Хто виконує це?	<b>I</b> (я)	<b>you</b> (ти/ ви)	<b>he</b> (він)	<b>she</b> (вона)	<b>we</b> (ми)	<b>they</b> (вони)	<b>it</b> (він, вона, воно — для неживих предметів)
2	Відповідають на питання непрямих відмінків Mary doesn't know ... Мері не знає...	<b>me</b> (мене)	<b>you</b> (тебе/ вас)	<b>him</b> (його)	<b>her</b> (її)	<b>us</b> (нас)	<b>them</b> (їх)	<b>it</b> (цього)
3	Відповідають на питання. чий?, чия?, чиє? It's (It is) my seat. Це моє місце. Its ( <i>the dog's</i> ) place is in the corner. Її ( <i>собаки</i> ) місце у кутку.	<b>my</b> book (моя)	<b>your</b> book (твоя/ ваша)	<b>his</b> book (його)	<b>her</b> book (її)	<b>our</b> book (наша)	<b>their</b> book (їх)	<b>its</b> place (його, її місце)
4	Reflexive pronouns (зворотні займенники) Перекладається «сам», «себе»	<b>myself</b>	<b>yourself</b>	<b>him-self</b>	<b>her-self</b>	<b>our- selves</b>	<b>them- selves</b>	<b>itself</b>

## Пасивний стан дієслова ( The Passive Voice)

### Пасивний стан групи *Indefinite*

Пасивний стан (Passive) утворюється за такою формулою:

**to be + III форма дієслова**

(інфінітив від дієслова to ask — to be asked (бути запитаним)). У цій формулі допоміжне дієслово **to be** відмінюється за особами, числами та часом. III форма відмінюваного дієслова залишається незмінною: I was **asked**; we were **asked**.

Щоб утворити Present, Past і Future Indefinite Passive необхідно дієслово **to be** поставити відповідно в Present, Past і Future:

to be + III (asked)		
Present	Past	Future
am is + III (asked) are	was were + III (asked)	shall be will be + III (asked)

Заперечення **not** ставиться після першого допоміжного дієслова :

I am **not** asked.

I was **not** asked.

I shall **not** be asked.

Для питальної форми перше допоміжне дієслово виноситься наперед підмета:

**Are** you asked?

**Was** he asked?

**Were** you asked?

**Will** they be asked?



Переклад пасивного стану на українську мову:

Приклади	Переклад	Способи перекладу
1.The patient was examined by the doctor yesterday.	Вчора лікар оглянув хворого (досл. Хворий був оглянутий лікарем вчора)	поєднанням дієслова бути з дієприкметником пасивного стану
2.The patient was examined because of abscess.	Хворого оглянули з приводу абсцеса.	дієсловом особової форми неозначено-особовим зворотом
3.The patient was examined at the clinic.	Хворий обстежувався в клініці.	дієсловом на -ся, -сь

### **Пасивний стан групи Continuous**

#### 1. Формула пасивного стану

to be + III форма дієслова

#### 2. Якщо в цій формулі поставимо допоміжне дієслово **to be** в Continuous — to be being, — то одержимо формулу пасивного стану групи Continuous:

to be being + III форма дієслова

#### 3. to be being examined

Present		Past		Future
am being is being are being	examined	was being were being	examined	немає

#### 4. Перше допоміжне дієслово відмінюється за часом, особами та числом.

#### 5. Заперечна частка **not** ставиться після першого допоміжного дієслова, наприклад: The patient **is not** being examined now.

Для утворення питальної форми перше допоміжне дієслово виноситься наперед підмета: **Is** the patient being examined now?

Примітка:

Форма Future Continuous Passive відсутня. На українську мову дієслова у Present і Past Continuous Passive перекладаються відповідно теперішнім та минулим часом недоконаного виду.

## Пасивний стан групи Perfect

1. Пасивний стан групи Perfect утворюється за формулою:

to be + III форма дієслова

(інфінітив від дієслова **to write** — **to be written**)

2. Якщо поставимо допоміжне дієслово в Perfect Tense, то одержимо формулу пасивного стану групи Perfect (**to have been written** — перфектний інфінітив):

to have been + III форма дієслова

3. У формулі:

to have been + III форма (**written**)

відмінюється перше допоміжне дієслово **to have**.

to have been written				
Present		Past		Future
have been has been	written	had been written	shall have been will have been	written

4. Заперечна частка **not** ставиться після першого допоміжного дієслова, наприклад: The book has **not** been written yet.

5. Для утворення питальної форми перше допоміжне дієслово виноситься наперед підмета, наприклад: **Had** the book been published by 1970?

## Розповідні речення (Declarative sentences)

Особливістю англійського речення порівняно з українським є сталий порядок слів, тобто перше місце посідає підмет, друге — присудок, третє — додаток, четверте — обставина.



Розповідне речення в англійській мові характеризується прямим порядком слів (*direct word order*), при якому підмет стоїть перед присудком, а додаток — за присудком.

Таблиця

Підмет 1	Присудок 2	Додаток 3	Обставина 4
<b>The teacher</b> Викладач	<b>asks</b> запитує	<b>the student</b> у студента	<b>at the lesson</b> на занятті
<b>The student</b> Студент	<b>asks</b> запитує	<b>the teacher</b> у викладача	<b>at the lesson</b> на занятті

## Питальні речення (Interrogative sentences)

### Загальні запитання (General questions)

Загальне запитання — це запитання до всього речення, на яке відповідь вимагає зворотного порядку слів. При цьому допоміжне (чи модальне) дієслово виноситься наперед (на нульове місце), потім ставиться підмет. Загальне запитання потребує відповіді “так” або “ні”, і, як правило, перекладається з часткою **чи**. Воно вимовляється з підвищеною інтонацією в кінці речення:

**Does she speak English?** — Чи говорить вона англійською мовою?  
**Yes, she does.** — Так.

### Спеціальні запитання (Special Questions)

1. Спеціальні запитання — це запитання до окремих членів речення. Вони завжди починаються питальними словами і вимовляються зі спадною інтонацією.

### Спеціальні запитання до підмета та його означення

2. Запитання, котрі відносяться до підмета, починаються питальними словами **who** хто; **what** що, які набувають властивості підмета і потребують прямого порядку слів:

**Who speaks English?**  
**What works well?**

**She speaks English.**  
**The engine works well.**

3. Запитання, котрі ставлять до означення підмета, починаються з питальних слів **whose** чий; **which, what** який і також потребують прямого порядку слів.

**Whose** sister studies at the institute? — **Чия** сестра навчається в інституті?  
**What** patients are in this dental surgery? — **Які** хворі перебувають зараз у цьому стоматологічному кабінеті?

## Спеціальні запитання до інших членів речення.

4. Спеціальні запитання, котрі ставлять до другорядних членів речення, починаються з питальних слів **what** що; **whom** кого, кому; **when** коли; **where** де, куди; **why** чому; **how** як; **how many(much)** скільки і потребують, як і загальні запитання, зворотного порядку слів. Проте на відміну від загальних, у спеціальних запитаннях перед допоміжним (або модальним) дієсловом стоїть питальне слово чи група слів:

**What does he read at home?**

**When does he read newspapers?**

1. Побудова розповідних і питальних речень.

Місце члена речення	??	0	1	2	3	4
Види речень і типи запитань	Питальне слово до групи присудка	Допоміжне дієслово	Підмет	Присудок	Додаток	Обставина місця, часу
Стверджувальна форма (прямий порядок)			My father	reads	news-papers	at home in the evening
Спеціальне запитання до групи підмета (прямий порядок)			Who	reads	news-papers	at home in the evening?
			Whose father	reads	news-papers	at home in the evening?
Загальне запитання (зворотний порядок слів)		Does	my father	read	news-papers	at home in the evening?
Спеціальні запитання до інших членів речення (зворотний порядок слів)	What	does	my father	do		at home in the evening?
	What	does	my father	read		at home in the evening?
	When	does	my father	read	news-papers	at home?
	Where	does	my father	read	news-papers	in the evening?



## Способи визначення присудка в англійському реченні

Присудок в англійському реченні можна визначити за такими ознаками:

а) за місцем (другим) у реченні:

Physicians **examine** patients.

б) за закінченнями: **-s(-es)** у третій особі однини теперішнього часу; **-ed(-d)** минулого часу групи Indefinite.

My sister **goes** to the institute in the morning.

The surgeon **operated** on the patient yesterday.

в) за допоміжними дієсловами **do (does, did), to be, to have, shall, will, should, would**:

He **has** come in time.

He **was** diagnosed pulpitis.

г) за модальними дієсловами: **can (could), may (might), must, should, ought to** повинен, слід **need** потребувати.

The doctor **could** diagnose alveolar abscess.

д) за прислівниками, котрі визначають дієслово:

These surgeons **always** operate **successfully**.

### Неозначено-особові речення.

В англійській мові неозначено-особове речення складається з формального підмета *it (one, they)* та узгодженого з ним присудка. (Із займенником *it* завжди виступає дієслово пасивного стану.)

They know that he works here

It is known that he works here

One knows that he works here

Відомо, що він працює тут.

### Безособові речення

1. Якщо в українському реченні немає підмета, то таке речення називається безособовим.

2. В англійських безособових реченнях, які означають явища природи, час, відстань чи відчуття, займенник *it* вживається без будь-якого значення, як формальний підмет.

3. На українську мову підмет *it* не перекладається.

4. Присудок англійського безособового речення звичайно складається з дієслова-зв'язки *to be* (будь-якого часу) та іменної частини, у ролі якої може виступати прикметник, іменник або числівник.

It is cold today.

Сьогодні холодно.

It was autumn.

Стояла осінь.

It will be warm.

Буде тепло.

### Зворот *there is (there are)*

Коли в центрі уваги того, хто говорить, знаходиться присудок, виражений дієсловами *бути, мати, перебувати, існувати*, тобто, коли йдеться про наявність або відсутність певного предмета, в англійській мові вживається зворот ***there is (there are)***.

***There are*** many interesting books in our library.

В нашій бібліотеці багато цікавих книжок.

У такому звороті **there** втрачає своє основне значення **там**, а лише вказує, що підмет стоїть після присудка, який перебуває в центрі висловлювання.

Переклад таких речень слід починати з обставини місця чи присудка.

Після звороту **there is** перед іменником в однині вживається неозначений артикль. У множині артикль випускається.

У заперечній формі після звороту **there is (there are)** як правило вживається займенник **no**, тобто заперечення стосується іменника, а не дієслова, отже, **no** виключає вживання артикля.

There is **no** book on the table.      На столі **немає (жодної)** книги.

#### **Примітка:**

Заперечення **not** вживається у короткій відповіді та у тому разі, коли після звороту йдуть слова: **any, enough, many, much**.

There is not any book on the table.      На столі немає (жодної) книги.

There is not enough (much) water in the glass.      У склянці води не досить (небагато).

Щоб утворити питальну форму, треба дієслово **to be** відповідного часу поставити перед **there**.

**Is there** a book on the table?      На столі книга?

Yes, there is.      Так.

No, there is not.      Ні.

У цьому звороті дієслово **to be** може вживатися в особовій формі (**was, were, shall be, will be**):

There **was** a book on the table.      На столі **була** книга.

There **will be** a new hospital in the village.      У селищі **буде** нова лікарня.

#### **Примітка:**

1) Зворот **there is (there are)** узгоджується з наступним іменником:

There **is** a book and two pencils on the table.      На столі книга і два олівці.

There **are** two pencils and a book on the table.      На столі два олівці і книга.

2) У звороті **there is (there are)** замість дієслова **to be** можуть вживатися інші дієслова: **to lie** лежати; **to stand** стояти; **to live** жити; **to grow** рости; **to become** ставати:

There **lives** a doctor there.      Там живе лікар.

3) Якщо слово **there** стоїть у кінці речення, то воно перекладається як обставина місця — **там**.

### **Підрядні додаткові та означальні речення.**

В англійській мові підрядні додаткові речення (object clauses) виконують функцію додатка до дієслова або прикметника в головному реченні. Вони приєднуються до головного речення сполучниками **that, if, whether**, спо-



лучними займенниками та прислівниками **who, whose, what, which, where, when, how, why**, а також безсполучниковим способом.

Додаткові підрядні речення перекладаються зі сполучником **що** або без нього:

I know my friend is not ill. Я знаю, (що) мій друг не хворий.

Підрядні означальні речення (attributive clauses) виконують роль означення до іменника або займенника головного речення і з'єднуються з ним за допомогою сполучних займенників **who, whose, which, that**, сполучних прислівників **where, when**, а також безсполучниковим способом.

Перекладаючи підрядні означальні речення, вводиться сполучник **який**, наприклад:

My friend you know well is not ill. Мій друг, якого ви добре знаєте, не хворий.

### **Виділення членів речення за допомогою підсилювальної конструкції *it is (was, will be) ... that (who, which)***

Іноді в англійських реченнях подибуємо конструкцію типу ***It is (was) ... that (who)***. На українську мову перекладаємо словом **came** і користуємося для виділення якого-небудь члена речення.

Якщо виділяється обставина часу, то як правило вживається ***it was not until ... that***, а в українській мові додаються слова **лише, лише після; лише тоді, коли**:

***It was not until 1538 that*** A.Vesalius published this work.  
**Лише** в 1538 році А.Везалій опублікував свою роботу.

### **Вживання Present замість Future у підрядних реченнях умови та часу.**

В англійських підрядних реченнях умови та часу не вживається майбутній час дієслова, замість нього вживаються відповідні форми теперішнього часу.

Підрядні речення умови та часу вводяться сполучниками ***if*** якщо, якби; ***as*** коли, в той час як; ***since*** з того часу як; ***when*** коли; ***whenever*** кожного разу, коли; ***as soon as*** як тільки; ***after*** після того як; ***before*** перш ніж, перед тим як; ***till, until*** поки; ***unless*** якщо не та іншими.

***If I knew his address,***  
I would write to him.  
I'll buy that novel ***when it comes out.*** (Fowles)  
***Whenever I pass her door,***  
I always hear her crying. (Albee)

Якби я знав його адресу,  
то написав би йому.  
Я куплю той роман, коли він вийде.  
  
Кожного разу, коли я проходжу повз її  
двері, я чую, що вона плаче.

## Суб'єктний інфінітивний комплекс

В англійській мові є така конструкція як суб'єктний інфінітивний комплекс, який має функцію складного підмета. Суб'єктний інфінітивний комплекс складається з двох частин. Перша частина комплексу — іменник у загальному відмінку або особовий займенник у називному відмінку. Друга частина комплексу — інфінітив, що виражає дію, яку виконує або зазнає особа чи предмет, позначений іменником (займенником).

*This girl* is known **to be** a good student. Відомо, що ця дівчина гарна студентка.

Особливістю суб'єктного інфінітивного комплексу є те, що перша і друга його частини відокремлені одна від одної присудком речення.

Присудком можуть бути такі дієслова (у пасивному стані): **to say** говорити; **to report** повідомляти; **to expect** сподіватися; **to know** знати; **to think** думати; **to consider** вважати; **to believe** думати, вірити; **to suppose** припускати, **to see**; **to find**; **to hear** тощо:

*This text-book* is said **to be printed** in Lviv.

Кажуть, що цей підручник друкується у Львові.

*The delegation* is reported **to have arrived** in Poltava.

Повідомляють, що делегація прибула до Полтави.

*He* was thought **to have gone**.

Думали, що він пішов.

*He* was seen **to enter** the laboratory. Бачили, як він заходив до лабораторії.

Суб'єктний інфінітивний комплекс вживається з дієсловами **to seem**, **to appear** здаватися; **to prove**; **to turn out** виявлятися; **to happen**; **to chance** траплятися:

*He* appears **to be ill**.

Здається, що він хворий.

Суб'єктний інфінітивний комплекс вживається зі словосполученнями **to be sure** напевно, **to be certain** безперечно, **to be likely** мабуть, **to be unlikely** навряд:

*They* are likely **to return** next week. Мабуть, вони повернуться наступного тижня.

Речення з суб'єктним інфінітивним комплексом на українську мову перекладаються здебільшого складнопідрядними реченнями. Переклад слід починати з присудка, який в українській мові перетворюється на неозначено-особове або безособове головне речення.

Інфінітив перекладається як присудок підрядного речення. Якщо вживається простий інфінітив, то він перекладається теперішнім часом, перфектний — минулим, а пасивного стану — присудком як активного, так і пасивного стану відповідного часу.

*He* is said **to live** here.

Кажуть, що він живе тут.

*He* is said **to have lived** here.

Кажуть, що він жив тут.

*He* is thought **to be discharged**

Вважають, що його випишуть з лікарні.



## Складний додаток

В англійській мові додаток може бути з групи слів, до складу якої входить іменник або займенник непрямого відмінка та інфінітив. Такий додаток називається *складним*.

На українську мову складний додаток перекладається підрядним реченням зі сполучниками *що, як, щоб*. При цьому іменник (займенник) у непрямому відмінку стає підметом українського підрядного речення, а інфінітив — присудком:

I know this surgeon (him)  
to operate on successfully.  
I want you to tell me about  
his mother. (*Wilde*)

Я знаю, що цей хірург (він)  
оперує успішно.  
Я хочу, щоб ви розповіли мені  
про його матір.

Складний додаток вживається після дієслів, що виражають:

а) бажання, намір, почуття: **to want** хотіти; **to wish, to desire** бажати; **should/would like** хотів би; **to hate** ненавидіти; **to intend** мати намір та ін.:

He intended **me to go** with  
him to the polyclinic.

Він хотів, щоб я пішов з  
ним до поліклініки.

б) думку (погляд), припущення, сподівання:  
**to expect** сподіватися; **to think** думати; **to consider, to believe** вважати;  
**to suppose** припускати; **to find** знаходити; **to know** знати та ін.:

We consider **him to be** the best  
student of our group.

Ми вважаємо його найкращим  
студентом нашої групи.

в) наказ, прохання, дозвіл, пораду, примус:  
**to order, to command** наказувати; **to ask, to request** просити; **to allow, to permit** дозволяти; **to advise, to recommend** радити, рекомендувати;  
**to cause, to force, to make** примушувати. Після дієслів **to make, to let** інфінітив вживається без частки **to**.

The teacher allowed **us**  
**to use** dictionaries.

Викладач дозволив нам користуватися  
словниками.

The doctor made the patient lie down. Лікар примусив хворого лягти.

г) сприймання за допомогою органів чуттів: **to see** бачити; **to hear** чути; **to feel** почувати; **to watch, to observe** спостерігати; **to notice** помічати. Після цих дієслів частка **to** не вживається:

Suddenly I heard **her call**  
my name. (*Braine*)  
I felt the pain become less.

Раптом я почув, що вона  
покликала мене.  
Я відчув, що біль поменшав.

Переклад складного додатка залежить від форми інфінітива, тобто простий інфінітив перекладається теперішнім часом, перфектний — минулим, а пасивного стану — присудком пасивного стану.

## Дієприкметник у складі складного додатка

Складний додаток може складатися з іменника або особового займенника та дієприкметника. Зворот з прикметником перекладається на українську мову підрядним реченням з дієсловом недоконаного виду та сполучником **як**:

The doctor heard the heart beating.

Лікар чув, як б'ється серце.

## НЕЗАЛЕЖНИЙ ДІЄПРИКМЕТНИКОВИЙ ЗВОРОТ

Якщо в англійському реченні у дієприкметниковому звороті перед дієприкметником стоїть іменник чи займенник у називному відмінку, то такий зворот називається **незалежним**. При цьому іменник (займенник) виступає в ролі підмета, а дієприкметник — присудка. Незалежний дієприкметниковий зворот виокремлюється комами.

Незалежний дієприкметниковий зворот перекладається на українську мову підрядним обставинним реченням зі сполучниками **оскільки, після того, як; коли, якщо** та ін. Якщо незалежний дієприкметниковий зворот стоїть у кінці речення, то на українську мову він перекладається складносурядним реченням зі сполучниками **при цьому, а, і, але**.

*My friend suffering from a severe pain*, I called in a doctor. The doctor palpated the patient's gum, *the pain becoming severe*.

**Оскільки мій приятель страждав від сильного болю**, я викликав лікаря. Лікар пальпував ясна хворого, **при цьому біль посилювався**.

Дієприкметник може бути простим, недоконаного виду або перфектним. Від цього залежить переклад на українську мову:

The doctor *having performed* the operation, the patient's condition began to improve.

**Після того, як лікар зробив операцію**, стан хворого покращав.

The operation *having been performed*, the patient's condition began to improve.

**Після того, як було зроблено операцію**, стан хворого покращав.

Дієприкметник від дієслова **to be (being, having been)** можна опускати:

The work *being done*, they went home.  
The work **done**, they went home.

**Після того, як роботу було закінчено**, вони пішли додому.

### Примітка:

Слова **there, one, if** у складі незалежного дієприкметникового звороту можуть виступати у ролі підмета:



*There being no high temperature,* Оскільки не було високої температури, хворий почувався краще.  
the patient felt better.

## УЗГОДЖЕННЯ ЧАСІВ У ПІДРЯДНОМУ ДОДАТКОВОМУ РЕЧЕННІ

Правило узгодження часів діє головним чином у складних реченнях з підрядним додатковим.

Якщо в англійському головному реченні дієслово-присудок стоїть у минулому часі, то і в підрядному додатковому реченні дієслово-присудок має бути в одному з минулих часів.

В українській мові такої залежності немає.

He said (that) he lived in Kyiv. Він сказав, що живе у Києві.

Коли у головному реченні дієслово-присудок стоїть у Past Indefinite (або Past Continuous), то в підрядному реченні ці часи свідчать про те, що дія відбулася одночасно з дією головного речення, і перекладаються на українську мову теперішнім часом:

She <b>said</b> that he <b>translated</b> the article.	Вона сказала, що він перекладає статтю.
She <b>said</b> that she <b>was writing</b> a letter.	Вона сказала, що пише лист.

Past Perfect у підрядному реченні показує, що ця дія відбулася раніш, ніж дія головного речення, і перекладається минулим часом:

He said (that) he had lived in Kyiv. Він сказав, що жив у Києві (раніше).

Якщо в головному реченні дієслово-присудок стоїть в Past Indefinite, а в підрядному реченні треба передати дію, котра має відбутися у майбутньому, то дієслово присудок підрядного речення вживається у Future in the Past і перекладається майбутнім часом. Допоміжні дієслова **shall, will** мають форму минулого часу **should, would**:

He said (that) he would live in Kyiv. Він сказав, що житиме у Києві.

## УМОВНИЙ СПОСІБ

Умовний спосіб виражає дію не як реальну, а як таку, що могла б відбутися за певних умов, а також необхідну, бажану або нереальну, нездійсненну. Форми переважної більшості дієслів умовного способу збігаються з формами дійсного способу. Виняток становлять дієслова 3-ої особи однини, котрі не мають закінчення **-s**:

It was necessary (that) the doctor **take** the patient's blood pressure immediately. Була потреба, щоб лікар негайно виміряв хворому кров'яний тиск.

Дієслово **to be** теперішнього часу має форму **be** для всіх осіб однини та множини, а минулого часу — форму **were** також для всіх осіб однини та множини:

It is important that the diet **be** strict in stomach ulcer patients.

I wish he **were** present at this operation.

Важливо, щоб дієта була суворою для хворих на виразку шлунку.

Я б хотів, щоб він був присутнім на цій операції.

Для утворення умовного способу також вживаються дієслова **should**, **would** та **might**:

The patient must follow the administered course of treatment lest an unfavourable reaction **should develop**.

Хворий має дотримуватися курсу призначеного лікування, щоб не спричинилася несприятлива реакція.

## Вживання умовного способу

Умовний спосіб вживається:

а) у підрядних умовних реченнях (як із сполучником **if**, так і без нього. В останньому випадку дієслово стоїть перед підметом).

If I **were** at home I **should** call in a doctor immediately. **Were** I at home, I **should** call in a doctor immediately.

Якби я був удома, я викликав би лікаря негайно.

б) у підрядних реченнях, які вводяться зворотом із займенником **it**:

**it is necessary** that  
**it is desirable** that  
**it is recommended** that  
**it is important** that  
**it is ordered**  
**it is demanded**

необхідно, щоб  
бажано, щоб  
рекомендується, щоб  
важливо, щоб  
наказано  
вимагається  
та іншими

**It is recommended** that the patients take their temperature every day.

Рекомендується, щоб хворі вимірювали температуру кожного дня.

в) у додаткових підрядних реченнях після дієслів **to suggest**, **to propose** пропонувати; **to insist** наполягати; **to wish** бажати; **to order**, **to command** наказувати; **to demand** вимагати, **to request** просити, **to advise** радити та інших.

The surgeon **suggested** that this patient **be** operated on next week.

Хірург запропонував, щоб цього хворого прооперували наступного тижня.

г) у підрядних реченнях, що приєднуються до головного сполучниками **as if**,



**as though** наче, ніби.

She looks **as if** she **were ill**.

Вона має такий вигляд, *ніби* хвора.

д) у підрядних реченнях, які вводяться сполучниками **lest** щоб не; **so that** для того, щоб.

You must keep your bed **lest** you  
**should have** a complication.

Ви маєте лежати в ліжку, щоб не  
одержати ускладнення.

**VOCABULARY****ENGLISH****СЛОВНИК****УКРАЇНСЬКА****СЛОВАРЬ****РУССКИЙ****A**

abate, v	послаблювати, притупляти	ослаблять, притуплять (боль)
abirritate, v	зменшувати (подразнення)	уменьшать (раздражение)
aboral, adj	аборальний (значно віддалений від ротової порожнини)	аборальный (значительно отдаленный от полости рта)
abutment, n	опора моста	опора моста
abrasion, n	патологічне стирання (зубів), абразія	патологическая стираемость (зубов), абразия
abrasive, adj	що стирається, абразивний	стираемый, абразивный
abruptly, adv	різко	резко
abscess, n	абсцес, гнійник, нарыв	абсцесс, гнойник, нарыв
absorption, n	поглинання, абсорбція	поглощение, абсорбция
accept, v	приймати	принимать
access, n	доступ	доступ
accidental, adj	випадковий	случайный
accomodate, v	пристосовувати	приспосабливать
accommodation, n	пристосування, адаптація	приспособление, адаптация
accordingly, adv	відповідно до	соответственно
accretion, n	зарощення, зрощення	заращение, сращение
accural, adj	ретельний	тщательный
accurate, adj	точний, правильний	точный
acid, n	кислота	кислота
acidophil, adj	ацидофільний	ацидофильный
acquired, adj	набутий	приобретенный
acrylic, adj	акриловий	акриловый
actinomycolosis, n	актиномікоз, проме- нисто-грибкова хвороба	актиномикоз, лучисто- грибковая болезнь
action, n	дія	действие
adamantinoma, n,	адамантинома (переважно кистозна пухлина в нижній щелепі)	адамантинома (преиму- щественно кистозная опухоль в нижней челюсти)
adamantoblast, n	адамантобласт (клітина, що виробляє емаль)	адамантобласт (клетка, вырабатывающая эмаль)
adaptation, n	адаптація, пристосування	адаптация, приспособление
add, v	додавати	добавлять
addition, n	додаток, доповнення	добавление
adenitis, n	аденіт (запалення лімфатичних вузлів)	аденит (воспаление лимфа- тических узлов)
adenoma, n	аденома	аденома
adequate, adj	достатній, відповідний	достаточный
adhere, v	дотримуватися	следовать



adherent,adj	зрощений, клейкий, липкий	срощенный, клейкий, липкий
adhesion,n	зчеплення,прилипання, адгезія, спайка	сцепление, прилипание, адгезия, спайка
adhesive,adj	злипливий, що утворює спайки, адгезивний (протез), клейкий, липкий	слипчивый,образующий спайки, адгезивный (протез), клейкий, липкий
adjacent, adj	прилеглий, суміжний	прилежащий, смежный
adjunctive, adj	допоміжний, додатковий, доповнюючий	вспомогательный, добавочный
adjust, v	вивіряти, регулювати, пристосовувати, настроювати, припасовувати	выверять, регулиро-вать, приспособливать, настраивать
adjustment, n	регулювання, пришліфовка, припасовування	регулировка, пригонка, приспособляемость
adontie, n	адентія (відсутність зубів)	адентия (отсутствие зубов)
absorption, n	всмоктування, адсорбція	всасывание, адсорбция
adult, adj	дорослий	взрослый
advantage, n	перевага	преимущество
advice, v	радити	советовать
advocate, v	обстоювати, захищати	отстаивать, защищать
aerobe, n	аероби, аеробні бактерії	аэробы, аэробные бактерии
aerobic, adj	аеробний	аэробный
aerodontalgia, n	аеродонтальгія	аэродонтальгия
aerodontia, n	аеродонтія	аэродонтия
affect, v	впливати	воздействовать, влиять
afford, v	мати змогу, надавати	позволять, предоставить
aggravate, v	загострювати, посилювати	ухудшать, усиливать
aging, n	старіння, знос, спрацьовування	старение, износ, изнашивание
aglossia, n	агლოსія (вроджена відсутність язика)	аглоссия (врожденное отсутствие языка)
agnathy, n	агнатія (вроджена відсутність щелепи)	агнатия (врожденное отсутствие челюсти)
aid, n	допомога, сприяння	помощь, содействие
AIDS, acquired immunodeficiency syndrome	СНІД — синдром набутого імунodefіциту	СПИД — синдром приобретенного иммунодефицита
albumin , n	білок, протеїн	белок, протеин
alginate, n	альгінатні (солі альгінатної кислоти як основа виготовлення еластичних відбиткових мас)	альгинатные (соли альгинатной кислоты как основа изготовления эластических оттисковых масс)
allergic, adj	алергічний	аллергический
allergy, n	алергія	аллергия
allow, v	дозволяти, робити можливим	позволить, разрешить
alloy,n	сплав, легування	сплав, легирование
almost, adv	майже, мало не	почти, едва не
alternating current, adj+n	змінний струм	переменный ток

alternatively, adv	альтернативно, по черзі	альтернативно, поочередно
aluminium, n	алюміній, Al	алюминий
although, conj	хоч	хотя
altogether, adv	цілком, загалом	вполне, в общем
alveolar, adj	ямковий, альвеолярний	луночковый, альвеолярный
alveolar rest, adj + n	рештки корня з альвеоли	остаток корня из альвеолы
amalgam, n	амальгама	амальгама
ambulant, adj	амбулаторний	амбулаторный
ameloblast, n	амелобласт, адамантобласт	амелобласт, адамантобласт
ameloblasoma, n	амелобластома,	амелобластома,
	адамантинома	адамантинома
amelogenesis, n	амелогенез (розвиток зубної емалі)	амелогенез (развитие зубной эмали)
amount, v	становити, доходити до	составлять, доходить до
ampule, n	ампула	ампула
amputation, n	ампутація, відтин, видалення	ампутация, отсечение, удаление
anaerobe, n	анаероби	анаэробы
anaerobic, adj	анаеробний	анаэробный
analgesia, n	аналгезія	аналгезия
analgesic, adj	аналгетичні речовини, болеотамувальні, знебо- люючі засоби	аналгетические средства, болеутоляющие средства
analysis, n	аналіз	анализ
anamnesis, n	анамнез	анамнез
anamnestic, adj	анамнестичний	анамнестический
anastomose, n	анастомоз	анастомоз
anatomical, adj	анатомічний	анатомический
anatomy, n	анатомія	анатомия
anchor band, n	опорне кільце, фіксатор	опорное кольцо, фиксатор
anemia, n	анемія, недокрів'я	анемия, малокровие
anemic, adj	анемічний, недокрівний	анемичный, малокровный
anesthesia, n	стан наркозу, анестезія	состояние наркоза, анестезия
anesthetic, n	анестезуючі засоби, зне- болюючі, болеотамуючі засоби	анестезирующие средства, обезболивающие средства
anesthetize, v	знеболювати, знечулювати	обезболивать
angle of the jaw, n+n	кут нижньої щелепи	угол нижней челюсти
animal, adj	тваринний	животный
anisodont, adj	що має зуби різної довжини	имеющий зубы разной длины
ankylosis, n	анкілоз	анкилоз
anneal, v	випалювати	отжигать
anodontia, n	адентія, анодонтія	адентия, анодонтия
anomalous, adj	неправильний, аномальний	неправильный, аномальный
anomaly, n	неправильність, аномалія, відхилення від норми	неправильность, аномалия, отклонение от нормы
antagonist, n	антагоніст	антагонист
anterior, adj	передній	передний
anthropometry, n	антропометрія	антропометрия



antibacterial,adj	антибактеріальний	антибактериальный
antibiotic,n	антибіотик	антибиотик
antibody,n	антитіло	антитело
anticoagulant,n	антикоагулянт	антикоагулянт
antiformin,n	антиформін	антиформин
antigen,n	антиген	антиген
antiphlogistic,adj	протизапальний	противовоспалительный
antiseptis,n	антисептика, знезаражування	антисептика, обеззараживание
antiseptic, adj	антисептичний	антисептический
antitoxin,n	антитоксин	антитоксин
antrum,n	порожнина, пазуха	полость, пазуха
anxiety,n	страх, стривоженість	боязнь, страх
aorta,n	аорта	аорта
apart, v, adv	відкладати в бік, на віддалі	откладывать в сторону, в отдалении
apex,n	верхівка, вершина	верхушка, вершина
aphthosis, n	афтоз	афтоз
apical, adj	верхівковий, апікальний	верхушечный, апикальный
apical reamer, adj + n	розширювач верхівок каналів	расширитель верхушек каналов
apicotomy, n	видалення верхівки кореня зуба, апікотомія (резекція)	удаление верхушки корня зуба, апикотомия (резекция)
aplasia,n	аплазія	аплазия
aplastic,adj	апластичний	апластический
apparatus,n	апарат	аппарат
apparent, adj	видимий, явний	видимый, различимый
appearance, n	зовнішній вигляд	внешний вид
appliance, n	пристосування, пристрій	приспособление, устройство
application,n	накладання, аплікація; застосування, вживання ліків	накладывание, аппли-кация; применение, употребление лекарств
apply, v	поводитися з, застосовувати	обращаться с, применяться
apposition, n	апозиція, контакт; відкладання, нашарування	аппозиция, контакт; отложение, наслоение
appreciate, v	оцінювати	оценивать
appropriate, adj	відповідний	соответствующий
approximal, adj	наближений, апроксимальний	приближенный, апроксимальный
arch, n	дуга	дуга
area, n	площина, поверхня	плоскость, поверхность
arrival, n	прибуття	прибытие
arsenic, n	миш'як, As	мышьяк
arteria, n	артерія	артерия
arterial,adj	артеріальний	артериальный
arthritis,n	артрит	артрит
arthropathy,n	артропатія	артропатия
arthrosis,n	артроз	артроз
articulating paper, n	артикуляційний папір	артикуляционная бумага
articulation,n	артикуляція; суглоб	артикуляция; сустав

articulator, n	артикулятор	артикулятор
artificial, adj	штучний;	искусственный;
- crown;	штучна коронка;	искусственная коронка;
- dentine	штучний дентин	искусственный дентин
aseptic, adj	асептичний, стерильний	асептический, стерильный
asphyxia, n	асфіксія, задуха	асфиксия, удушье
aspiration, n	аспірація	аспирация
associate, v	асоціювати, пов'язувати з	ассоциировать, связывать с
astringent, n	в'яжучий засіб	вяжущее средство
asymmetric, adj	асиметричний	асиметричный
asymmetry, n	асиметрія	ассиметрия
atrophic, adj	атрофований, атрофічний	атрофированный, атрофический
atrophy, n	атрофія	атрофия
attached, adj	прирослий, зрощений	приросший, сращенный
attachment, n	прикріплення, фіксація	прикрепление, фиксация
attack, n	напад, приступ (хвороби)	приступ, припадок
attend, v	відвідувати, бути присутнім	посещать, присутствовать
attract, v	приваблювати, полонити, притягати	привлекать, притягивать
atypic, adj	атиповий	атипичный
authority, n	влада, вплив	власть, влияние
autoclave, n	автоклав	автоклав
autodestruction, n	саморуйнування, саморозпад	саморазрушение, самораспад
autogenetic, adj	аутогенний	аутогенный
auxiliary, adj	допоміжний	вспомогательный
available, adj	придатний, доступний	пригодный, доступный
average, adj	середній	средний
avirulent, adj	авірулентний	авирулентный
avoid, v	уникати	избегать
axial, adj	осьовий, аксіальний	осевой, аксиальный
axis, n	вісь	ось

## В

backward, adv	назад	назад
bacteremia, n	бактеріємія	бактериемия
bacterial, adj	бактеріальний	бактериальный
bactericide, n	бактерицидний	бактерицидный
bacteriological, adj	бактеріологічний	бактериологический
bacteriology, n	бактеріологія	бактериология
bacterium, n	бактерія	бактерия
balanced occlusion, n	збалансована оклюзія	сбалансированная окклюзия
band, n, v	обід, смужка; зв'язувати	связка, кромка; связывать, соединять
basal, adj	основний, базальний	основной, базальный
base, n	база, основа	база, основание
baseplate, n	відбиткова ложка	оттискная ложка
basic, adj	основний, лужний	основной, щелочной



basophil, adj	базофіл, базофільна клітина	базофил, базофильная клетка
beam, n,	промінь, струмінь	луч, струя
beeswax, n	бджолиний віск	пчелиный воск
beneficial, adj	корисний	полезный
benign, adj	доброякісний, сприятливий	доброкачественный, благоприятный
bib, n	серветка-нагрудник	салфетка-нагрудник
bifurcation, n	біфуркація, роздвоєння, розгалуження	бифуркация, раздвоение, разветвление
bilateral, adj	білатеральний, двобічний, взаємний	билатеральный, двусторонний, взаимный
bilophodont, adj	білофодонт	билофодонт
bind, v	зв'язувати, затвердівати	связывать, затвердевать
biometry, n	біометрія	биометрия
biopsy, n	біопсія	биопсия
biostatistics, Pl	біостатистика	биостатистика
bite, n	прикус	прикус
bite-block, n	прикусний валик (для визначення оклюзивного співвідношення щелепи)	прикусной валик (для определения окклюзионного соотношения челюсти);
bite-wing, n	прикусний пристрій (для рентгенографії зубів)	прикусное устройство (для рентгенографии зубов)
bitegage, n	прикусний шаблон (з прикусним валиком)	прикусной шаблон (с прикусным валиком)
biteplate, n	ортодонтична піднебінна накусна пластинка	ортодонтическая небная накусочная пластинка
bladder, n,	пухир, міхур	пузырь
bleeding, n,	кровотеча	кровотечение
blood coagulation, n,	зсідання крові	свертывание крови
blood group, n+n	група крові	группа крови
blood pressure, n+n	артеріальний тиск	артериальное давление
blood-vessel, n+n	кровоносна судина	кровеносный сосуд
blow, n, v	удар; дмухати	удар; дуть
bond, n	зв'язок	связь
bonding agent, n+n	бондинг	бондинг
bone marrow, n+n	кістковий мозок	костный мозг
border, n	межа, край	граница, предел, край
bottle, n	пляшка, пляшечка	бутылка, пузырек
bracket, n	назубна скоба	назубная скоба
branch, n	галузь; гілка	отрасль; ветвь
brass, n	латунь	латунь
break, n	розрив	разрыв
break down, n	поломка	поломка
breath, n	дихання	дыхание
bridge, n	міст (зубний протез), мостовидний протез	мост (зубной протез), мостовидный протез
bristle, n	щетинка (біопсійної щітки)	щетинка (биопсийной щеточки)
broad, adj	широкий, з широкою основою	широкий, с широким основанием

# С

calcification, n	кальцифікація, обвапнування, окостеніння	кальцификация,
calcium, n	кальцій, Са	кальций
calculus, n	зубний камінь	зубной камень
caliper, n	коло, шарнір	круг, шарнир
call, v	звати, називати	звать, называть
calming, n	заспокоєння, полегшення (болю)	успокоение, облегчение (болей)
canal, n	канал, прохід, протока	канал, проход, проток
cancer, n	рак	рак
cancerogenic, adj	канцерогенний	канцерогенный
canine, n	ікло, глазний зуб	клык, глазной зуб
canula, n	канюля, порожниста голка, трубочка	канюля, полая игла, трубочка
capillary, n	капіляр, капілярна кровоносна судина, капсула	капилляр, капиллярный кровеносный сосуд, капсула
capsule, n	карбід	карбид
carbide, n	вуглеводень	углевод
carbohydrate, n	вуглець, С	углерод
carbon, n	карбонат, вуглекисла сіль	карбонат, углекислая соль
carbonate, n	карборунд	карборунд
carborundum, n	канцерогенний, карциногенний	канцерогенный, карциногенный
carcinogenic, adj	рак, карцинома	рак, карцинома
carcinoma, n	карієс, кариєс зубів, костоїд	кариес, костоеда, кариес зубов
caries, n	каріозний	кариозный
cariogenic, adj	хрящ	хрящ
cartilage, n	картридж	картридж
cartidge, n	випадок (хвороби), клінічне спостереження	случай (болезни), клиническое наблюдение
case, n	лиття	отливка
casting, n	віск для лиття	воск литьевой
casting wax, adj+n	каталаза	каталаза
catalase, n	каталізатор	катализатор
catalyst, n	каутер, припалювач, випалювач	каутер, прижигатель, выжигатель
cautery, n	утворення порожнини (кавітація)	образование полости, кавитация
cavitation, n	порожнина, пазуха	полость, пазуха
cavity, n	препарування (каріозної) порожнини	препарирование (кариозной) полости
cavity preparation, n+n	клітина	клетка
cell, n	клітинний, целюлярний	клеточный, целлюлярный
cellular, adj	зубний цемент	зубной цемент
cement, n	цементикль	цементикль
cementicle, n	цементобласт	цементобласт
cementoblast, n	точка обертання	точка вращения
center of rotation, n+n		



central, adj	центральний	центральный
centric, adj	центровий, центричний	центральной, центрический
ceramic, adj	порцеляновий	фарфоровый
ceramics, n	кераміка, порцеляна	керамика, фарфор
cerebellum, n	мозочок	мозжечок
cervical, adj	шийний, шийковий, пришийковий	шейный, шейный, пришеечный
chain, n	ланцюг	цепь
chamber, n	камера	камера
check up, n	огляд	осмотр
cheek, n	щока	щека
cheilist, n	хейліт (запалення губ)	хейлит (воспаление губ)
cheilognathouranos chisis, n	“вовча паща”	“волчья пасть”
cheiloschisis, n	“заяча губа”	“заячья губа”
chewing, n	жування	жевание
chin, n	підборіддя	подбородок
chip, n	стружка, осколок	стружка, осколок
chisel, n	долото, різець	долото, резец
chisel-shaped, adj	долотоподібний	долотообразный
chromic acid, n	хромовая кислота	хромовая кислота
chromosome, n	хромосома	хромосома
chronic caries	хронічний карієс	хронический кариес
circular, adj	коловий, циркулярний	круговой, циркулярный
circulation of the blood, n+n	кровообіг	кровообращение
circumscribed, adj	обмежений, окреслений	ограниченный, очерченный
clasp, n	кламер, дужка для швів	кламмер, скобка для швов
cleft palate, adj+n	незрощення піднебіння	несращение неба
cleft velum, n+n	розколина піднебіння	расщелина неба
clove oil, n + n	гвоздичова олія	гвоздичное масло
coagulation necrosis, n + n	коагуляційний некроз	коагуляционный некроз
coagulum, n	кров'яний згусток	кровяной сгусток
coat, n	оболонка, покриття	оболочка, покрытие
cobalt, n	кобальт, Co	кобальт
cocci, Pl, n	коки	кокки
coefficient of elasticity, n+n	коефіцієнт еластичності	коэффициент эластичности
coefficient, n	коефіцієнт	коэффициент
cofferdam, n	коффердам, перемичка	коффердам, перемычка
cohesion, n	когезія	когезия
collagen, n	колаген	коллаген
collagenic, adj	колагеновий	коллагеновый
colliquative necrosis, adj+n	коліквацийний некроз	коликвационный некроз
colony, n	колонія бактеріальна	колония бактериальная
colour, n,	колір, барвник	краска, краситель, цвет
commence, v	починати, ставати	начинать, становиться
comminute, v	подрібнювати	тонко измельчать

common, adj	загальний	общий
common salt solution, adj+n+n	розчин хлористого натрію	раствор хлористого натрия
complete, v	завершувати	завершать
complication, n	комплікація, ускладнення	компликация, осложнения
component, n	компонент, складова частина	компонент, составная часть
composite, n	композит	композит
comprehensive, adj	всебічний, обширний	всеобъемлющий
compress, v	стискати, здавлювати	сжимать, сдавливать
compression	компресія, здавлення, стиснення	компрессия, сдавливание
concave, adj	угнутий, увігнутий	вогнутый
concentration, n	концентрація	концентрация
concern, v n	мати відношення, турбувати; ставлення	иметь отношение, беспокоить; отношение
concrement, n,	конкремент, камінь	конкремент, камень
concrecence of teeth, n	зрощення, конкреценція (напр., коренів зубів)	сращение, конкреценция (напр., корней зубов)
condensation, n	конденсація, ущільнення,	конденсация, уплотнение
condense, v	конденсувати, сгущувати, ущільнювати	конденсировать, сгущать, уплотнять
conditioner, n	кондиціонер	кондиционер
condyle, n	виросток	мыщелок
confine, v	обмежувати	ограничивать
congenital, adj	врожденний	врожденный
congestion, n,	застій, стаз	застой, стаз
conic, adj,	конічний	конический
connective tissue, adj+n	сполучна тканина	соединительная ткань
consequence, n	послідовність	последовательность
conservative dentistry, adj+n	терапевтична стоматологія	терапевтическая стоматология
consider, v	вважати	считать, полагать
consistency, n	консистенція	консистенция
constitute, v	призначати, становити	назначать, составлять
constitution, n	конституція, будова, будова тіла	конституция, строение, телосложение
consultation, n	консультація, консилиум	консультация, консилиум
consume, v	знищувати, витратити, споживати	истреблять, расходовать, потреблять
continued, adj	тривалий,	продолжительный, длительный
continuous, adj	тривалий, затяжний	длительный, затяжной
contour, n	форма, контур	форма, контур
contra-indication, n	протипоказання	противопоказания
contraction, n	скорочення, зморщування	сокращение, сморщивание
conus, n	конус	конус
copper, n	мідь, Cu	медь



coronal, adj	коронковий (що належить до коронки зуба)	коронковый (относящийся к коронке зуба)
coronoid, adj	короноїдальний	короноидальный
correction, n	корекція	коррекция
corresponding, adj	відповідний	соответствующий
corrosion, n	корозія, роз'їдання	коррозия, разъедание
corundum, n	корунд	корунд
cotton roll, n+n	ватний валик	ватный валик
counter-action, n	протидія	противодействие
cover, n v	оболонка; вкривати	оболочка; покрывать
cramp, n	спазм, судорога, судома	спазм, судорога
creosote, n	креозот	креозот
crepitation, n	крепітація, тріск	крепитация, треск
crevice, n	тріщина, щілина	трещина, щель
cristalline, adj	кристалічний, прозорий	кристаллический, прозрачный
crook, n v	крюк; згинати	крюк; изгибать
cross bite, adj+n	перехресний прикус	перекрестный прикус
crowd, n	натовп	множество; толпа
crowding, n	скупчення	скученность
crown, n	коронка	коронка
crystal, n	кристал	кристалл
cup, n	чашечка	чашечка
curettage, n,	кюретаж, вискоблювання, вискрібання	кюретаж, выскабливание
current, adj	поточний	текущий, нынешний
cuspid, n	вістря зуба, горбик	острие зуба, бугорок
	коронки зуба	коронки зуба
cutter, n	фреза	фреза
cutting of teeth, n+n,	прорізування зубів	прорезывание зубов
cyanosis, n	цианоз, синюшність	цианоз, синюшность
cycle, n	коло, цикл	круг, цикл
cyst, n	кіста	киста

## D

dark, adj	темний	темный
damage, n v	пошкодження; пошкоджувати	повреждение; повреждать
dead, adj	нежиттєвий	безжизненный
death, n	смерть	смерть
debridement, n	хірургічна обробка рани	хирургическая обработка раны
debris, n	зубні відкладення	зубные отложения
decalcification, n	декальцифікація	декальцификация
decay	карієс	кариес
decompensation, n	декомпенсація	декомпенсация
decompose, v	розкладатися, гнити	разлагаться, гнить
defect, n	дефект, вада, пошкодження	дефект, порок, повреждение
defective, adj	з вадами, неповний	порочный, неполный
deficient, adj	недостатній, позбавлений (чого-небудь)	недостаточный, лишенный

deformed, adj	деформований	деформированный
deformation, n	деформація	деформация
deformity, n	зміна форми	изменение формы
degenerated, adj	дегенерований, перероджений	дегенерированный, переродженный
degeneration, n	дегенерація, переродження	дегенерация, перероджение
dehiscence, n	розходження (країв рани)	расхождение (краев раны)
dehydration, n	дегідратація, обезводнювання	дегидратация, обезвоживание
demarcation, n	демаркація, розмежовування	демаркация, разграничение
demineralization, n	демініралізація	деминерализация
dendrite, n	дендрит	дендрит
dens, n,	зуб	зуб
dense, adj	густий, щільний	густой, плотный
dental arch, adj+n	зубна (альвеолярна) дуга	зубная (альвеолярная) дуга
dental calculus, adj+n,	зубний камінь	зубной камень
dental caries, adj+n	карієс зуба	кариес зуба
dental cuticle, adj+n	кутикула емалі	кутикула эмали
dental deposit, adj+n	наліт на зубах, зубний камінь	налет на зубах, зубной камень
dental enamel, adj+n,	зубна емаль	зубная эмаль
dental floss, adj+n	нитка для очищення зубних проміжків	нить для чистки зубных промежутков
dental fluorosis, n	флюороз зубів	флюороз зубов
dental follicle, adj+n	зубний фолікул	зубной фолликул
dental forceps, adj+n	зубні щипці	зубные щипцы
dental formula, adj+n	формула зубів	формула зубов
dental germ, adj+n	зачаток зуба	зачаток зуба
dental lamina, adj+n	зубна пластинка (ембріону)	зубная пластинка (эмбриона)
dental malfor- mation, adj+n	вада розвитку зубів	порок развития зубов
dental pulp, adj+n	зубна пульпа	зубная пульпа
dental sack, adj+n	зубний мішечок (в ембріона)	зубной мешочек (у эмбриона)
dental surgery, n	стоматологічний кабінет	стоматологический кабинет
denticle, n	дентикль	дентикль
dentin, n	дентин	дентин
dentinification, n	гістогенез дентину, дентиногенез	гистогенез дентину, дентиногенез
dentist, n	зубний лікар, дантист	зубной врач, дантист
dentition, n	зуби, щелепа	зубы, челюсть
denture, n	зубний протез	зубный протез
deprive, v	позбавляти	лишать
depolymerization, n	деполімеризація	деполимеризация
desensibilization, n	десенсибілізація	десенсибилизация
desiccation, n	висихання, висушування	высыхание, высушивание
desmodont, n	періодонт	периодонт
desmodontal ligement, adj+n	періодонтальна зв'язка	периодонтальная связка



destruction,n	руйнування, деструкція, розпад, розклад	разрушение, деструкция, распад,разложение, расщепление
detect, v	виявляти	обнаруживать
detergent, n	дезинфікуючі засоби	дезинфицирующие средства
determine, v	визначати	определять
devitalize,n	умертвляти, девіталізувати	умерщвлять, девитализировать
devitalizing paste,n	засіб для девіталізації зубного нерва	средство для девитализации зубного нерва
diabetes mellitus,n	цукровий діабет (цукриця)	сахарный диабет
diagnose, v	ставити діагноз, діагностувати	ставить діагноз, диагностировать
diagnosis,n	діагноз	диагноз
diagnostic,adj	діагностичний	диагностический
diameter,n	діаметр	диаметр, поперечник
diamond covered,adj	покритий діамантом	покрытый алмазом
diastema,n	діастема	диастема
diazone,f	діазонія, темні полоси зубного шліфа	диазония, темные полосы зубного шлифа
die, n	матриця	матрица
diet,n	дієта, режим харчування	диета, режим питания
dietary, adj	дієтичний	диетический
differential	диференціальний діагноз	дифференциальный диагноз
diagnosis, adj+n		
diffuse, adj	дифузний, розсіяний	диффузный, рассеяный
diffuse	розсіяне випромінення	рассеяное излучение
irradiation, adj+n		
diffusion, n	дифузія	диффузия
digital, adj	пальцевий, пальцеподібний	пальцевой, пальцевидный
dilaceration, n	розрив, розщеплення	разрыв, расщепление
dilaceration screw,n	ортодонтичний гвинт	ортодонтический винт
dilatation,n	розтяг, розширення, втягування	растяжение, расшерение, вытяжение
dimensional, adj	просторовий	пространственный
dip in cold water,v	загартувувати, занурювати в холодну воду	закаливать, погружать в холодную воду
diphyodont,adj	дифіодонт	дифиодонт
direct, adj	прямий	прямой
direct current, adj+n	постійний струм	постоянный ток
discolouration,n	зміна кольору	изменение цвета
discover, v	відкривати	открывать
disinfectant, n	дезинфекційні засоби	дезинфицирующие средства
disinfection, n	дезинфекція, знезаражування	дезинфекция, обеззараживание
disinfection solution, n	дезинфекційний розчин	дезинфицирующий раствор
disinfection unit, n+n	дезинфекційний пристрій	дезинфицирующее устройство
dislocated,adj	зміщений	смещенный

dislocation, n	зміщення, дислокація	смещение, дислокация
dislodge, v	видаляти, витіснити	удалять, вытесняют
dispensary, n	амбулаторія	амбулатория
dispenche, v	відміряти	отмерять
disponated, adj,	що має схильність	предрасположенный
disposition, n,	схильність, нахил	предрасположение
dissection, n	секція, розтин,	секция, рассечение,
	препарування	препарирование
dissociation, n	дисоціація	диссоциация
distal, adj	дистальний, периферійний	дистальный, периферический
distocclusion, n	дистальний прикус	дистальный прикус
distomolar, n	дистомоляр	дистомоляр
distortion, n	спотворення, викривлення	искажение, искривление
distracton, n	розтягування, витягування	растягивание, вытяжение
disturbance, n	порушення	нарушение
diverdence, n	розходження, дивергенція	расхождение, дивергенция
diverticulum, n	дивертикул	дивертикул
dominant, adj	домінантний	доминантный
dosage, n	дозування	дозировка
dose, n	доза	доза
double, adj	подвійний	двойной
drain, n v	дренаж, дренажування	дренаж, дренирование
	дренувати	дренировать
drainage, n	дренаж, дренажування	дренаж, дренирование
dressng, n	пов'язка	повязка
drssng forceps, adj+n	корцанг	корцанг
drift, n	намір, знесення	намерение, снос
drill, v	сверлити, препарувати	сверлить, препарировать
drop out, v	не вносити	не вносить
dry caries, n,	сухий карієс	сухой кариес
dryed, adj	висушений	высушенный
duct, n	прохід, канал	проход
dullness, n	притупленість,	притупленость,
	приглушеність	приглушенность
dummy, adj	несправжній, навчальний	ложный, учебный
durable, adj	тривалий, стійкий	продолжительный, стойкий
dysgnathia, n	дисгнатія, порушення	дисгнатия, нарушение
		(аномалия) прикуса
dysontoginesis, n	порушення процесу	нарушение процесса
	розвитку	развития
dysplasia, n	дисплазія, дисгенезія	дисплазия, дисгенезия
dystrophy, n	дистрофія, дегенерація,	дистрофия, дегенерация,
	переродження	перерождение

## E

early diagnosis, adj+n	попередній діагноз	предварительный диагноз
ECG	електрокардіографія	электрокардиография
ectasia, n	ектазія, розширення,	эктазия, расширение,
	розтягування	растягивание



ectoderm, n	ектодерма	эктодерма
ectomy, n	ектомія, видалення	эктомия, удаление
ectopia, n	ектопія, зміщення	эктопия, смещение
eczema, n	екзема	экзема
edge-wise arch, n+n	зовнішня дуга	внешняя дуга
effect, n	ефект, дія, вплив, результат	эффект, действие, влияние, результат
efflorescence, n	висип, ефлоресценція, наліт	сыпь, высыпание, эфлоресценция, налет
elastic, adj	еластичний, пружний	эластичный, упругий
elasticity, n	еластичність, пружність	эластичность, упругость
electromagnetic wave, adj+n	електромагнітні хвилі	электромагнитные волны
electron microscope, n+n	електроний мікроскоп	электронный микроскоп
electrophoresis, n	електрофорез	электрофорез
element, n	елемент	элемент
elevator, n	елеватор ( при стоматологічних операціях)	элеватор ( при стоматологических операциях)
eliminate, v	виключати, знищувати	исключать, уничтожать
elimination, n	виведення, виділення, елімінація	выведение, выделение, элиминация
embolism, n	емболія	эмболия
embryo, n	зародок, ембріон	зародыш, эмбрион
emphysema, n	емфізема	эмфизема
empyema, n	емпієма	эмпиема
emulsion, n	емульсія	эмульсия
enamel, n	емаль	эмаль
enamel membrane, n+n	епітеліальний шар емалевого органа	эпителиальный слой эмалевого органа
enamel organ, n+n	емалевий орган	эмалевый орган
enamel prism, n+n	емалева призма	эмалевая призма
enamel pulp, n+n	пульпа емалевого органа	пульпа эмалевого органа
end, n	кінець	конец
end-to-end bite, adj+n	прямий (щипцеподібний ) прикус	прямой (щипцеобразный ) прикус
endemia, n	ендемія	эндемия
endodontal, adj	ендодонтичний	эндодонтический
endodontia, n	ендодонтія, ендодонтологія	эндодонтия, эндонтология
endodontic treatment, adj+n	ендодонтичне лікування	эндонтическое лечение
endodontium, n	пульпа зуба	пульпа зуба
endogenous, adj	ендогенний	эндогенный
endoscopy, n	ендоскопія	эндоскопия
endothelium, n	ендотелій	эндотелий
endotoxin, n	ендотоксин	эндотоксин
energy, n	енергія	энергия
ensue, v	послідувати	последовать
ensure, v	забезпечувати	обеспечивать
entail, v	спричиняти	навлекать

entire, adj	цілковитий, досконалий	полный, совершенный
entry, n	вхід, доступ	вход, доступ
enzyme, n	фермент, ензим	фермент, энзим
epicrisis, n	епікриз	эпикриз
epidemic, n	епідемія	эпидемия
epidemiology, n	епідеміологія	эпидемиология
epidermal, adj	епідермальний	эпидермальный
epidermis, n	епідерміс	эпидермис
epiglottis, n	надгортанник	надгортанник
epipharynx, n	носоглотка	носоглотка
epiphysis, n	епіфіз	эпифиз
epithelium, n	епітелій	эпителий
epulis, n	епуліс, пухлина ясен	эпулис, опухоль десны
equal, adj	рівний, однаковий	равный, одинаковый
eradicate, v	виривати з коренем	вырывать с корнем
erosion, n	ерозія, садно, пошкодження	эрозия, ссадина, повреждение
erupt, v	прорізуватися (про зуби)	прорезываться (о зубах)
eruption, n	прорізування зубів, прорив, перфорація	прорезывание зубов, прорыв, прободение, перфорация
erythrocyte, n	еритроцит, червоне кров'яне тілце	эритроцит, красное кровяное тельце
escape, v	рятуватися	спасаться
esophagus, n,	стравохід	пищевод
essential, adj	есенціальний, суттєвий	эссенциальный, существенный
etch, v	протравлювати	протравливать
eugenol, n	евгенол, гвоздичова олія	эвгенол, гвоздичное масло
eugnotic, adj	правильний прикус	правильный прикус
evade, v	уникати, не піддаватися	избегать, не поддаваться
evoke, v	викликати	вызывать, пробуждать
exacerbation, n	загострення, спалах	обострение, вспышка
excessive, adj	зайвий	излишний
excess material, n	надлишок матеріалу	излишек материала
excision, n	ексцизія,	иссечение,
excitation, n	збудження	возбуждение
exogenic, adj,	екзогенний	экзогенный
exostosis, n	екзостоз, кістковий нарост	экзостоз, костный нарост
expansoin, n	розширення, поширення	расширение, распространение
expectant, adj	очікуваний	ожидаемый
expectant mother, n	мати, яка чекає	ожидающая мать
expectation, n	очікування	ожидание
expel, v	виганяти	выгонять
experiment, n	експеримент, дослід	эксперимент, опыт
expose, v	піддавати	подвергать
extand, v	протягувати	протягивать
extension, n	виправлення екстензія	выпрямление, экстензия
extirpation, n	екстирпація, видалення	экстирпация, удаление
extract, v	видаляти	удалять



extraction,n  
extrusion,n  
exudation,n  
exulceration,n

екстракція, видалення  
виштовхування, зміщення  
ексудація  
виразкування, ульцерація

экстракция, удаление  
выталкивание, смещение  
эксудация  
изъязвление, ульцерация

## F

face, n  
facette, n  
facial, adj  
facilitate, v  
facultative,adj  
faunting, n  
fat, n  
fear, n  
favour, n  
febrile, adj  
feel dead, v  
feeling, n,  
fermentation,n  
fetal,adj  
fetid,adj  
feter exore, n+n  
fetus,n  
fever,n  
fiber,n  
fibril,n

fibrilary,adj  
fibrin,n  
fibrocyte,n  
fibroma,n  
fibrous,adj  
file, n

fill, v  
filling,n

film,n  
film thickness, n+n  
filter,n  
finish,v  
firm, adj  
first molar

tooth, adj+n+n  
first aid, adj + n  
fissure,n, cleft,n

fistula,n  
fit, v

обличчя  
грань, фасетка  
лицевий, фасціальний  
полегшувати, просувати  
факультативний  
втрата свідомості, синкопе  
жир, сало  
страх  
прихильність  
гарячковий, фебрильний  
потерпнути  
чуття, відчуття  
бродиння, ферментація  
зародковий  
смердючий, сморідний  
запах з рота

плід  
лихоманка, гарячка  
волокно, нитка  
волоконце, ниточка,  
фібрила  
волокнистий, фібрилярний  
фібрин  
фіброцит  
фіброма  
фіброзний, волокнистий  
кореневий бурав,  
каналорозширювач

заповнювати, пломбувати  
зубна пломба, наповнення,  
заповнення  
плівка, наліт  
товщина плівки  
фільтр  
полірувати  
твердий  
перший постійний моляр

перша допомога  
фісура, щілина, тріщина,  
борозна  
свищ, фістула  
припасовувати,  
пристосовувати

лицо  
грань, фасетка  
лицевой, фасциальный  
облегчать, продвигать  
факультативный  
обморок, синкопе  
жир, сало  
страх  
благосклонность  
лихорадочный, фебрильный  
онеметь  
чувство, ощущение  
брожение, ферментация  
зародышевый  
вонючий, зловонный  
запах изо рта  
плод  
лихорадка  
волокно, нить  
волоконце, ниточка,  
фибрилла  
волокнистый, фибриллярный  
фибрин  
фиброцит  
фиброма  
фиброзный, волокнистый  
корневой бурав,  
каналорасширитель  
заполнять, пломбировать  
зубная пломба, наполнение,  
заполнение  
пленка, налет  
толщина пленки  
фильтр  
полировать  
твердый  
первый постоянный моляр

первая помощь  
фиссура, щель, трещина,  
борозда  
свищ, фистула  
подгонять, приспособливать

fixation, n	закріплення, фіксація	закрепление, фиксация
flame, n	полум'я	пламя
flap, n	доля, клапот, клапан	доля, лоскут, клапан
flask, n	кюретка	кюретка
flat, adj,	плоский, рівний	плоский, ровный
flatten, v	ущільнювати	уплотнять, подравнивать
flexible, adj	гнучний, еластичний, пружний	гибкий, эластичный, упругий
fluctuation, n	флуктуація коливання (рідини)	флуктуация колебания (жидкости)
fluid, n	рідина	жидкость
fluorescence, n	флюоресценція	флюоресценция
fluoride, n	фторид	фторид
fluoridation, n	фторування	фторирование
fluorine, n	фтор	фтор
fluorosis, n	флюороз	флюороз
flux, n	надмірне виділення	избыточное выделение
focal infection, adj+n	осередкова (фокальна) інфекція	очаговая (фокальная) инфекция
focal, adj	осередковий, фокальний	очаговый, фокальный
focus, n	осередок, фокус, патологічний осередок	очаг, фокус, патологический очаг
fold, n	складка, зморшка	складка, морщина
folded, adj	складчатий, зморщений	складчатый, морщинистый
follicle, n	фолікул, сумка, мішечок	фолликул, пузырек
follicular, adj	фолікулярний, що належить до фолікула	фолликулярный, относящийся к фолликулу
follow, v	наслідувати	следовать
following, adj,	подальший	последующий
foramen, n	отвір	отверстие
force, n	сила, зусилля, енергія	сила, усиление, энергия
foreign body, adj+n	сторонній предмет	инородное тело
form of nutrition, n+n	спосіб харчування	способ питания
firma, n	формальний, точний	формальный, точный
formaldehyde	формальдегід	формальдегид
formalin, n	формалін	формалин
formation, n	формація, утворення	формация, образование
fossa, n	ямка	ямка
foubrouant, adj	з бурхливим перебігом;	бурно протекающий,
fulminant, adj	швидкоплинний	скоротечный
fracture, n	перелом, злам, фактура	перелом, фактура
fragile, adj	крихкий	ломкий
fragment, n	уламок, фрагмент	обломок, фрагмент
free, adj	вільний, відкритий	свободный, открытый
frenotomy, n	підрізання вуздечки язика	надсечение уздечки языка
frenulum, n	вуздечка (язика)	уздечка (языка)
frequensy, n	частота	частота
frequently, adv	часто	часто
fresh, adj	чистий, свіжий	чистый, свежий,



frit, n v	післяопераційний фарфорова маса; приготовляти фарфорову масу	послеоперационный фарфоровая масса; приготавливать фарфоровую массу
frontal sinus, adj+n frontal, adj	лобова пазуха чоловий, передній, фронтальний	лобная пазуха лобный, передний, фронтальный
fructose, n	фруктоза	фруктоза
full, adj	повний	полный
function, n	функція, діяльність	функция, деятельность
functional appliance, n	активатор (пристрій), збудник (напр., фермент)	активатор (устройство), воз- будитель (напр., фермент)
functional impression, adj+n	функціональний відбиток	функциональный оттиск
functional, adj	функціональний	функциональный
fur, n	наліт, відкладення	налет, отложение
furnace, n	піч	печь
furrow, n	борозна, зморшка	борозда, морщина
furrowed tongue, adj+n	складчастий язик	складчатый язык
further, adj	дальній	дальний
fusion of teeth, n	злиття зубів, синодонтія	слияние зубов, синодонтия
fuse, v	просувати	продвигать
futile, adj	марний, даремний	напрасный

## G

gaglion, n	нервовий ганглії, вузол	нервный ганглий, узел
gangrene, n	гангрена	гангрена
gangrenous, adj	гангренозний, змертвілий	гангренозный, омертвелый
gap in the teeth, n+n	дефект зубного ряду	дефект зубного ряда
gargle, v	полоскати	полоскать
gates drills, n + n	кореневі свердла	корневые сверла
geminate teeth, adj+Pl	зуби-близнюки	зубы-близнецы
gemination of tooth, n,	подвоєння зубів	удвоение зубов,
gene, n	ген	ген
general, adj	загальний	общий
generative, adj	котрий спричиняє	порождающий
genetics, n	генетика	генетика
germ, n	зародок	зародыш
germ-layer, n	зародковий листок	зародышевый листок
gerodontolog, n	геростоматологія	геростоматология
gerontology, n	геронтологія	геронтология
gerostomatolog, n	геродонтологія	геродонтология
gingiva, n	ясна	десна
gingival rigmentation, n	свинцева кайма	свинцовая кайма
gingival sulcus, adj+n	яснева борозенка	десневая бороздка
gingivectomy, n	гінгівектомія	гингивэктомия
gingivitis, n	гінгівіт, запалення ясен	гингивит, воспаление десен

gland, n	залоза	железа
glass ionomer, n+n	склоіономер	стеклоіономер
glossalgia, n	глосалгія, біль язика	глоссалгия, боль в языке
glossitis, n	глосит, запалення язика	глоссит, воспаление языка
glossobynia, n	паління язика	жжение в языке
glucose, n	глюкоза, виноградний цукор	глюкоза, виноградный сахар
gnathoschisis, n	врожене незрощення верхньої щелепи, гнатосхізис	врожденное несроссечение верхней челюсти, гнатосхизис
gold, n	золото, Au	золото
granulation, n	грануляція, утворення гранул	грануляция, образование гранул
granulocyte, n	гранулоцит	гранулоцит
granuloma, n	гранулема (гранульома)	гранулема
grateful, adj	вдячний	благодарный
grind, v	розмелювати	размалывать
grip, v	стискати, захоплювати	стискивать, захватывать
groove, n	боріздка	бороздка
guarantee, v	гарантувати	гарантировать
growth, n	ріст, розвиток	рост, развитие
gum pocket, n+n	зубо-яснева кишенья	зубо-десневой карман
gum, n	ясна	десна
gustation, n	смакове відчуття, проба на смак	вкусовое ощущение
gutta-percha, n	гуттаперча	гуттаперча
gutta-percha point, n + n	гуттаперчевий штифт	гуттаперчевый штифт

## Н

habit, n	звичка, будова тіла	привычка, телосложение
habitual, adj	звичайний, звичний, габітуальний	обычный, обыкновенный, габитуальный
hairy tongue, adj+n	черний (волосатий) язик	черный (волосатый) язык
hammer, n	молоток	молоток
hand, n	рука, ручка	рука, рукоятка
handicapped, n	інвалід	инвалид
handpiece, n	наконечник (для бормащини)	наконечник (для бормашины)
hard, adj	твердий	твердый
harden, v	затвердівати	затвердевать
hardness, n	пружність, жорсткість, твердість	упругость, жесткость, твердость
harm, n	школа	вред
head, n	головка	головка
healing, n	загоювання, видужання, лікування, виліковування	заживление, выздоровление, лечение, излечение
health, n	здоров'я	здоровье
healthy, adj	здоровий	здоровый



heart, n	серце, серцевина, центральна частина	сердце, сердцевина, центральная часть
heed, n v	виймання; враховувати	вынимание; учитывать
helix, n	завиток, спіраль	завиток, спираль
hemangioma, n	гемангіома	гемангиома
hematogen, adj	гематогенний	гематогенный
hematology, n	гематологія	гематология
hematoma, n	гематома, кров'яна пухлина	гематома, кровяная опухоль
hematoxysin, n	гематоксилін (барвник)	гематоксин (краситель)
hemoglobin, n	гемоглобін	гемоглобин
hemophilia, n	гемофілія	гемофилия
hemorrhage, n	геморагія, кровотеча, крововилив	геморрагия, кровотечение, кровоизлияние
hemostasis, n	зупинка кровотечі, гемостаз	остановка кровотечения, гемостаз
hemostatic, adj,	кровоспинний, кровозупиняючий	кровоостанавливающий
hepatitis, n	гепатит	гепатит
hereditary, adj	спадковий, успадкований	наследственный, унаследованный
heredity, n	спадковість	наследственность
herpes, n	герпес, лишай	герпес, лишай
heterodont, adj	гетеродонтичний	гетеродонтический
hide, v	ховати	прятать
hidrophil, adj	гідрофільний	гидрофильный
high cusps, adj+n	супраоклюзія	супраокклюзия
histamine, n	гістамін	гистамин
histiocyte, n	гістіоцит	гистиоцит
histogenesis, n	гістогенез (розвиток тканини в онтогенезі)	гистогенез (развитие ткани в онтогенезе)
histology, n	гістологія	гистология
history taking, n+n	збирання анамнезу	сбор анамнеза
hold, v	тримати	держать
homogeneous, adj	однорідний; гомогенний	однородный, гомогенный
horizontal destruction, n	горизонтальне руйнування	горизонтальное разрушение
hormone, n	гормон	гормон
hospital, n	госпіталь, шпиталь, лікарня	госпиталь, больница
humid caries, n	вологий карієс	влажный кариес
hurt, v	здавати болю	причинять боль
hydrocarbon, n	вуглеводень	углеводород
hydrochloric, adj+n,	соляна кислота, HCl	соляная кислота
hydrogen dioxide, n+n	перекис водню	перекись водорода
hydrogen, n	водень, H	водород
hydrogenion concentration, n+n	концентрація іонів водню	концентрация ионов водорода
hydrophobic, adj	гідрофобний (про речовину)	гидрофобный (о веществе)
hydroxide, n	гідроокис	гидроокись
hygiene, n	гігієна, санітарна культура	гигиена, санитарная культура

hygienic,adj	гігієнічний, санітарний, оздоровчий	гигиенический, санитарный, оздоровительный
hygienization,n	створення гігієнічних умов	создание гигиенических условий
hygroscopic,adj	гідроскопічний	гидроскопический, гидроскопичный
hyoid bone, adj+n	під'язикова кістка	подъязычковая кость
hyperemia,n	гіперемія, повнокрів'я	гиперемия, полнокровие
hyperesthesia, n	гіперестезія, підвищена чутливість	гиперестезия, повышенная чувствительность
hyperplasia, n	гіперплазія, надлишковий ріст тканини	гиперплазия, избыточный рост ткани
hypertrophia, n	гіпертрофія	гипертрофия
hypertrophic, adj	гіпертрофічний	гипертрофический
hypodontia, n	гіподонтія	гиподонтия
hypoplasia, n	гіпоплазія, гіпогенезія	гипоплазия, гипогенезия
hypoplastic, adj	гіпопластичний, недорозвинений	гипопластический, недоразвитый
hypotonia,n	гіпотонія	гипотония
hypotonic, adj	гіпотонічний	гипотонический

# I

IARD (International Assotiation for Dental Research)	Міжнародна федерація стоматологів	Международная федерация стоматологов
iatrogenic, adj	ятрогенний (про захворювання)	ятрогенный (о заболеваниях)
idiopathic, adj	ідіопатичний, незрозумілого походження	идиопатический, неясного происхождения
imbed, v	імплантувати, заливати	имплантировать, заливать
imbibition, n	вбирання, всмоктування	впитывание, всасывание, пропитывание
immerse, v	поглинати	поглощать
immobilization, n	імобілізація, нерухомість, фіксація	иммобилизация, неподвижность, фиксация
immobilize, v	імобілізувати, робити нерухомим, фіксувати	иммобилизовать, делать неподвижным, фиксировать
immunity, n	іmunітет, несприйнятливість (до чого)	иммунитет, невосприимчивость (к чему)
immunization, n	іmunізація, профілактичні щеплення	иммунизация, профилактические прививки
impacted, adj	ущемлений, здавлений	ущемленный, сдавленный
implant, n	імплантант, вживлюваний матеріал	имплантант, вживляемый материал
implant, v	імплантувати, вживляти	имплантировать, вживлять
implantation,n	імплантація, вживлення	имплантация, вживление
impression material, n	маса для одержання відбитків (зубів, щелеп)	масса для получения слепков (зубов, челюстей)



impression tray, n	відбиткова ложка	оттискная ложка
impression, n	зліпок, відбиток	слепок, оттиск, отпечаток
improvement, n	покращання	улучшение
in vitro	у пробірці, поза організмом	в пробирке, вне организма
in vivo	у живому організмі	в живом организме
incidence, n	випадок	случай
incision, n	інцизія, розріз, розтин	инцизия, разрез, рассечение
incisor, n	передній зуб, різець	передний зуб, резец
incisura, n	вирізка, виїмка, інцизура	вырезка, выемка, инцизура
incorporation, n	інкорпорування, приєднання, включення	инкорпорирование, присоединение, включение
incrustation, n	інкрустація, відкладення солей	инкрустация, отложение солей
incubation, n	інкубація, латентний період	инкубация, латентный период
incurable, adj	невиліковний, незцілимий	неизлечимый, неисцелимый
index, n	індекс, показник, стрілка (на приладі)	индекс, показатель, стрелка (на приборе)
indication, n	показання, відлік (приладу), індикація	показание, отсчет (прибора), индикация
indicator, n	індикатор, показник, стрілка (приладу)	индикатор, указатель, стрелка (прибора)
induction, n	індикація, навіювання	индикация, внушение
inert, adj	інертний, застійний, пасивний	инертный, застойный, пассивный
inevitable, adj	неминучий	неизбежный
infection, n	зараження, інфекція	заражение, инфекция
infectious, adj	інфекційний, заразний, контагіозний	инфекционный, заразный, контагиозный
infective, adj	інфікований, заражений	инфицированный, зараженный
infiltrate, n	інфільтрат	инfiltrат
infiltration, n	інфільтрація, проникнення, просочування	инfiltrация, проникновение, просачивание
inflamed, adj	запалений	воспаленный
inflammation, n	запалення	воспаление
inflammatory, adj	запальний	воспалительный
infraocclusion, n	інфраоклюзія	инфраокклюзия
infraction, n	надлом, перелом	надлом, перелом
infusion, n	інфузія, вливання	инфузия, вливание
ingredient, n	складова частина, компонент	составная часть, компонент
inhale, v	вдихати, дихати, робити інгаляцію	вдыхать, дышать, делать ингаляцию
inheritance, n	спадковість, успадкування	наследственность, наследование
initial, adj	початковий, відправний, вихідний	начальный, исходный
injection, n	ін'єкція, вприскування	инъекция, впрыскивание
injury, n	пошкодження	повреждение, ранение, рана

inlay, n	поранення, рана вкладка, тимчасова пломба, лита вкладка	вкладка, пломба, временная пломба, литая вкладка
innervation, n	інервація	иннервация
insert, v	вводить	вводить
inserted, adj	вставлений, введенний	вставленный, введенный
inspection, n	огляд	осмотр
insulate, n	ізолювати	изолировать
intact, adj	здоровий, неускладнений	здоровый, неосложненный
interdental, adj	міжзубний	межзубной
interfere, v	втручатися, шкодити	вмешиваться, причинять
вред		
interglobular, adj	міжглобулярний	межглобулярный
intermaxillary, adj	розміщений допереду від верхньої щелепи	расположенный к переду от верхней челюсти
interrupt, v	переривати, порушувати	прерывать, нарушать
intervention, n	втручання	вмешательство
intoxication, n	інтоксикація, отруєння, сп'яніння	интоксикация, отравление, опьянение
intracellular, adj	внутрішньоклітинний, інтрацелюлярний	внутриклеточный, интрацеллюлярный
intramuscular, adj	внутрішньом'язовий, інтрамускулярний	внутримышечный, интрамускулярный
intravenous, adj	внутрішньовений, інтравенозний	внутривенный, интравенозный
introduction, n	введення, внесення	введение, внесение
intrusion, n	інтрузія	интрузия
intrubation, n	інтубація	интубация
invagination, n	інвагінація, вкручування, впровадження	инвагинация, ввертывание, внедрение
invasion, n	вторгнення хвороботворних збудників, інвазія	вторжение болезнетворных возбудителей, инвазия
investment compound, n	пакувальна маса (матеріал)	паковочная масса (материал)
investment, n	імплантація, заливання	имплантация, заливка
involve, v	втягати	вовлекать
involution, n	інволюція, зворотній розвиток	инволюция, обратное развитие
iodine, n	йод, I	иод
iodoform, n	йодоформ	иодоформ
irradiation, n	ірадіація, випромінення, опромінення	иррадиация, излучение, облучение
irregular, adj	нерегулярний, неправильний	нерегулярный, неправильный
irreversible, adj	необоротний, безповоротний	необратимый, невозвратный
irritant, n	подразник	раздражитель
isolate, v	ізолювати, відокремлювати, виділяти, виокремлювати	изолировать, обособлять, выделять
isolation, n	ізоляція, відокремлення,	изоляция, разобщение,



isotonic, adj	розз'єднання, виділення	выделение
isotope, n	ізотонічний	изотонический
isotropic, adj	ізотоп	изотоп
isthmus, n	ізотропний	изотропный
	перешийок, вузьке місце,	перешеек, перемычка,
	вузький прохід	суженное место
ivory, n	слонова кістка	слоновая кость

## J

jaw, n	щелепа	челюсть
jiggiling, adj	рухомий (про зуб), розхитаний	расшатанный
joint-capsule, n	суглобова сумка	суставная сумка
jugulum, n	горло, глотка	горло, глотка
junction, n	з'єднання, стик	соединение, стык
juvenile, adj	юнацький, юний, молодий, ювенільний	юношеский, юный, молодой, ювенильный

## K

keloid, n	келоїд, келоїдний рубець	келоид, келоидный рубец
keratin, n	кератин	кератин
kit, n	набір	набор

## L

labial, adj	губний, лабіальний	губной, лабиальный
labially displaced	супраоклюзія	супраокклюзия
cuspid, adj+ adj+n		
labile, adj	лабіальний, нестійкий, рухомий	лабиальный, неустойчивый, подвижный
lack, n	відсутність	отсутствие
lancet, n	ланцет, скальпель	ланцет, скальпель
larynx, n	гортань, ларингс	гортань, ларингс
laser, n	лазер	лазер
lateral alveolar	пародонтальний абсцес	пародонтальный абсцесс
abscess, n		
layer, n	шар	слой
lesion, n	пошкодження, ушкодження, ураження	повреждение, поражение
leukemia, n	лейкоз, лейкемія	лейкоз, лейкемия
leukocyte, n	лейкоцит, білокрівець	лейкоцит, белое кровяное тельце
leukoplakia, n	лейкоплакія	лейкоплакия
levator, n	піднімач, піднімаючий м'яз	подъемник, поднимающая мышца
level, n	важіль	рычаг, уровень
lichen, n	лишай	лишай
ligament, n	зв'язка, пов'язка, вуздечка	связка, повязка, уздечка
ligate, v	перев'язувати (судини), тверді (про гіпс, вапно тощо)	перевязывать (сосуды), твер- дые (о гипсе, извести и пр.)

ligation, n,	перев'язка накладання	перевязка, наложение
ligature, n	лігатури	лигатуры
light curing, n + n	лігатура, перев'язка	лигатура, перевязка
limbus, n	світлозатвердження	светоотверждение
lime, n	лімб	лимб
lingual, adj	вапно	известь
lining, n	язиковий, лінгвальний	язычный, лингвальный
	захисний матеріал,	защитный материал,
	прокладка	прокладка
lip, n	губа	губа
lipoid, n	ліпоїд, ліпід	липоид, липид
livid, adj	синюватий, блідно-синій	синеватый, бледно-синий
local	місцева анестезія, місцеве	местная анестезия, местное
anesthesia, adj+n	знечулення	обезболивание
local, adj	місцевий, локальний	местный, локальный
localization, n	локалізація,	локализация,
	місцезнаходження	местоположение
lockjaw, n	тризм, зімкнення щелеп	тризм, сведение челюстей
lodgement, n	впровадження	внедрение
logopedics, n	логопедія	логопедия
longitudinal, adj	поздовжній,	продольный,
	лонгитудинальний	лонгитудинальный
long-lasting, adj	тривалий	продолжительный
look like, v	мати вигляд, бути схожим	выглядеть, быть похожим
loose, v	втрачати	терять
loss of the teeth, n+n	випадіння зубів	выпадение зубов
lower jaw, adj+n	нижня щелепа	нижняя челюсть
luster, n	блиск	блеск
luxate, v	звихнути	вывихнуть
luxation, n	вивих	вывих
lye, n	луг	щелочь
lymph node, n+n	лімфатичний вузол	лимфатический узел

## M

macroscopic, adj	макроскопічний	макроскопический
maceration, n	мацерація, розм'якшення	мацерация, размягчение
macrochelia, n	макрохейлія (губи надто великого розміру)	макрохейлия (губы чрезмерно большого размера)
macrodontia, n	макродентія, мегалодонтія (зуби надто великого розміру)	макродентия, мегалодонтия (зубы чрезмерно большого размера)
macrogenia, n	макрогенія	макрогения
macroglossia, n	макроглосія (язик надто великого розміру)	макроглоссия (язык чрезмерно большого размера)
macrognathia, n	макрогнатія	макрогнатия
macroscopy, n	макроскопія	макроскопия
maculated, adj,	плямистий	пятнистый
magnesium, n	магній, Mg	магний
maintain, v	підтримувати, відстоювати, продовжувати	поддерживать, продолжать



majority, n	більшість	большинство
malformation, n	аномалія розвитку, потворність	аномалия развития, уродство
malignant, adj	злорякісний	злокачественный
malnutrition, n	недостатність, порушення харчування	недостаточность, нарушение питания
malocclusion, n	аномалія прикусу, аномалія зубної оклюзії	аномалия прикуса, аномалия зубной окклюзии
mandible, n	нижня щелепа	нижняя челюсть
mandibular, adj	нижньощелеповий, мандибулярний	нижнечелюстной, мандибулярный
mandrel, n	дискотримач (затискний пристрій до бормащини)	дискодержатель (зажимное приспособление к бормашине)
manganese, n	марганець, Mn	марганец
manifestation, n	вияв	проявление
manipulate, v	обробляти, впливати	обрабатывать, воздействовать
manual, adj	ручний, мануальний	ручной, мануальный
margin, n	край	край
marginal	крайове прилягання	краевое прилегание
integrity, adj+n		
marrow, n	мозок	мозг
massage, n	масаж	массаж
masticate, v,	жувати	жевать
masticating	жувальний м'яз, масетер	жевательная мышца,
muscle, adj+n		массетер
masticating	жувальна поверхня	жевательная поверхность
surface, adj+n		
mastication, n	жування, розжовування	жевание, разжевывание
masticatory	жувальна сила	жевательная сила
force, adj+n		
masticatory	жувальний тиск	жевательное давление
pressure, adj+n		
match, v	відповідати одне одному	подходить друг к другу
matrix, n	основа, матриця, форма	основа, матрица, форма
mature, adj	зрілий	зрелый
maxilla, n	верхня щелепа	верхняя челюсть
maxillary sinus, adj+n	верхньощелепова (гайморова) пазуха	верхнечелюстная (гайморова) пазуха
maxillary, adj	верхньощелеповий	верхнечелюстной
measure, v	вимірювати	измерять
medial, adj	середній, медіальний	средний, медиальный
mediator, n	посередник, медіатор	посредник, медиатор
medicament, n	лікарський засіб (препарат)	лекарственное средство (препарат)
medicamentous, adj	медикаментозний, лікарський	медикаментозный, лекарственный
medication, n	призначення, медикація	назначение, медикация
medicinal, adj	медичний, лікарський, цілющий	медицинский, врачебный, целебный
medicine, n	ліки, медицина	лекарство, медицина

melanodontia, n	меладонтія	меладонтия
melt, v	плавити, розплавлювати	плавить, расплавлять
melting point, n+n	точка плавлення	точка плавления
membrane	капсула абсцесу	капсула абсцесса
of abcess, n		
membrane, n	мембрана, плівка, оболонка	мембрана, пленка, оболочка
mental, adj	ментальний, підборідковий	ментальный, подбородочный
mercury, n	ртуть, Hg	ртуть
mesial, adj	мезіальний	мезиальный
mesiocclusion, n	передня оклюзія, мезіальний прикус	передняя окклюзия, мезиальный прикус
mesodens, n	надкомплектний дрібний зуб між верхніми центральними різцями	сверхкомплектный мелкий зуб между верхними центральными резцами
mesoderm, n	мезодерма, мезобласт	мезодерма, мезобласт
metabolism, n	обмін речовин	обмен веществ
metal, n	метал	металл
metallurgy, n	металургія	металлургия
metamorphosis, n	метаморфоза, переродження	метаморфоза, перерождение
metaplasia, n	метаплазія	метаплазия
metastasis, n	метастаз, метастазування	метастаз, метастазирование
methulene blue, n+n	метиленовий синій	метиленовый синий
microbial, adj	мікробний	микробный
microbion, n	мікроб, мікроорганізм	микроб, микроорганизм
microbiota, Pl	мікроорганізми, мікроби	микроорганизмы, микробы
microdantia, n	мікродонтизм (зуби надто малого розміру), мікродонтія	микродентия (зубы чрезмерно малого размера) микрофлора, микробный пейзаж
microflora, n	мікрофлора, мікробний пейзаж	
microgenia, n	мікрогенія (нижня щелепа надто малого розміру)	микрогения (нижняя челюсть чрезмерно малого размера)
microglossia, n	микроглосія (язик надто малого розміру)	микрогlossия (язык чрезмерно малого размера)
micrognathia, n	мікрогнатія (верхня щелепа надто малого розміру)	микрогнатия (верхняя челюсть чрезмерно малого размера)
microleakage, n	мікропроникність	микропроницаемость (краевая)
microorganism, n	мікроорганізм, бактерія	микроорганизм, бактерия
microscopic, adj	мікроскопічний	микроскопический
microscopy, n	мікроскопія	микроскопия
microtome, n	мікротом	микротом
midwife, n	жінка по догляду за породіллями	женщина по уходу за роженицами
milk tooth, n+n	молочний зуб	молочный зуб
mineral, n	мінерал	минерал
mineralization, n	мініралізація, звапнення	минерализация, обызвествление



missing, adj	відсутній	отсутствующий
mistake, n	вада, недолік, дефект	недостаток, порок, дефект
mitochondrion, n	мітохондрія	митохондрия
mitosis, n	мітоз (мітотичний поділ)	митоз (митотическое деление)
mix, v	змішувати, замішувати	смешивать, замешивать
mixing pad, adj + n	блокнот для замішування	блокнот для замешивания
mobilization, n	мобілізація (відновлення рухомості)	мобилизация (вос- становление подвижности)
model base, n + n	базис моделі	базис модели
model cast, n	литво на моделі (вогнетривкій)	литье на модели (огнеупорной)
model pour, adj + n	ливарна модель	литьевая модель
modulus of elasticity, n+n	модуль еластичності	модуль эластичности
moisten, v	зволожувати	увлажнять
molar tooth, n	моляр, великий корінний зуб	моляр, большой коренной зуб
molarinform, adj	моляровидний	моляровидный
molecule, n	молекула	молекула
monochromatic, adj	монохроматичний, однокольоровий	монохроматический, одноцветный
monomer, n	мономер	мономер
monosaccharide, n	моносахарид, моноз	моносахарид, моноз
morbidity, n	захворюваність	заболеваемость
moribund, adj	вмираючий	умирающий
morfogenesis, n	морфогенез	морфогенез
morphology, n	морфологія	морфология
mortality, n	смертність, летальність	смертность, летальность
motile, adj	рухомий, здатний скорочуватись	подвижный, способный сокращаться
motion, n	рух	движение
mottled tooth, adj+n	плямистий зуб	пятнистый зуб
mouth breathing, n+n	ротове дихання, дихання через рот	ротовое дыхание, дыхание через рот
mouth gag, n+n	ротрозширювач	роторасширитель
mouth wash, n + n	засіб для полоскання рота	средство для полоскания рта
mucopolysaccharide, n	мукополісахарид	мукополисахарид
mucosa, n	слизова оболонка	слизистая оболочка
mucous membrane, adj+n	слизова оболонка	слизистая оболочка
mucos, adj	слизовий, покритий слизом	слизистый, покрытый слизью
mull, n	марля	марля
multiple, adj	множинний, багаторазовий	множественный, многократный
multipurpose, adj	багатоцільовий	многоцелевой
muscle, n	м'яз, мускул	мышца, мускул
mutagen, n	мутаген	мутаген
mycosis, n	мікоз	микоз
myography, n	міографія	миография

# N

napkin, n	серветка	салфетка
nasal, adj	носовий	носовой
sodium, n	натрій, Na	натрий
neck of the tooth, n+n	шийка зуба	шейка зуба
necrobiosis, n	некробіоз, місцевий некроз	некробиоз, местный некроз
necrobiotic, n	некробіотичний	некробиотический
necrosis, n	некроз, змертвіння, відмирання	некроз, омертвление, отмирание
necrotic, adj	некротичний, змертвілий	некротический, омертвелый
needle-holder, n	голкутримач	иглодержатель
neoplasia, n	новоутворення, пухлина, неоплазма	новообразование, опухоль, неоплазма
neoplasm, n	неоплазма, новоутворення, пухлина	неоплазма, новообразование, опухоль
neoplastic, n	що відноситься до пухлини, пухлинний	относящийся к опухоли, опухолевый
nerval, adj	нервовий	нервный
nerve cell, n+n,	нервова клітина	нервная клетка
nerve fiber, n+n	нервове волокно	нервное волокно
nervous	нервова система	нервная система
system, adj+n		
neural, adj	невральний, нервовий	невральный, нервный
neuralgia, n	невралгія	невралгия
neuralgic, n	невралгічний	невралгический
neuritis, n	неврит, запалення нерва	неврит, воспаление нерва
neurosis, n	невроз	невроз
neurotic, adj	невротичний, збудливий	невротический, возбудимый
neutroclulsion, n	нейтральний прикус	нейтральный прикус
nevus, n	невус, родима пляма	невус, родимое пятно
nickel, n	нікель, Ni	никель
noxa, n	нома, волога гангрена	нома, влажная гангрена
nomenclature, n	номенклатура, система найменувань	номенклатура, система наименований
nomogram, n	номограма	номограмма
nonocclusion, n	відкритий прикус	открытый прикус
norm, n	норма, здоров'я	норма, здоровье
normal, adj	нормальний, правильний, фізіологічний	нормальный, правильный, физиологический
nosocomial, adj	госпітальний, внутрішньолікарняний	госпитальный, внутрибольничный
nosologic, adj	нозоологічний	нозологический
nosology, n	нозоологія, класифікація хвороб	нозоология, классификация болезней
nourish, v	годувати, вигодовувати	кормить, вскармливать
nourishment, n	їжа, харчування	пища, питание
noxa, n	шкідливий агент, патогенний фактор, шкідливість	вредный агент, патогенный фактор, вредность
nucleus, n	ядро	ядро



nut, n

gorix

орех

## O

objective, n

об'єктив

объектив

obligation, n

відповідальність

ответственность

obliteration, n

облітерація, зарощення, непрохідність

облитерация, закупорка, зарощение

observation, n

спостереження

наблюдение

obtain, v

одержувати, досягати

получать, достигнуть

obturation, n

обтурація, непрохідність, пломба кореневого каналу зуба

обтурация, закупорка, пломба кореневого канала зуба

obturator, n

обтуратор

обтюратор

occasion, n

випадок, можливість

случай, возможность

occlusion, n

оклюзія

окклюзия

occur, v

відбуватися

происходит

odema, n

набряк

отек

odontoblast, n

одонтобласт

одонтобласт

odontogenesis, n

одонтогенез (утворення та розвиток зуба)

одонтогенез (образование и развитие зуба)

odontogenic, adj

одонтогенний

одонтогенный

odontography, n

одонтографія

одонтография

odontology, n

одонтологія, стоматологія

одонтология, стоматология

odontoma, n

одонтома, зубна пухлина

одонтома, зубная опухоль

oil, n

олія

растительное масло

oligodontia, n

олігодонтія (неповна кількість зубів)

олигодонтия (неполное количество зубов)

onset, n

початок (хвороби)

начало (болезни)

ontogenesis, n

онтогенез

онтогенез

ontogenetic, adj

онтогенний, одонтогенний

онтогенный, одонтогенетический

opacity, n

непрозорість, помутніння

непрозрачность, помутнение

opaque, adj

непрозорий, м

непрозрачный, светонепроницаемый

opisthognathia, n

опістогенія, аномалія прикусу

опистогения, аномалия ч прикусу

oral, adj

оральний, ротовий

оральный, ротовой

orbit, n

орбіта, глазна западина

орбита, глазная впадина

ordinary, adj

звичайний

обычный

organ, n

орган

орган

organic, adj

органічний

органический

organism, n

організм, мікроорганізм, мікроб

организм, микроорганизм, микроб

organization, n

організація, побудова

организация, построение

organize, v

організовувати

организовывать

organogenesis, n

органогенез, розвиток органа

органогенез, развитие органа

organogenetic, adj

органогенетичний

органогенетический

orthodontia, n

ортодонтія, розділ стоматології

ортодонтия, раздел стоматологии

orthodontic, adj	ортодонтичний	ортодонтический
osmosis, n	осмос	осмос
osmotic, adj	осмотичний	осмотический
ossification, n	закостеніння	окостенение
ossify, v	(за)костеніти	окостеневать
osteoblast, n	остеобласт (клітина кісткової тканини)	остеобласт (клетка костной ткани)
osteodentin, n	остеодентин	остеодентин
osteomyelitis, n	остеомиєліт	остеомиелит
overlap, v	перекривати	перекрывать
overlay, v	вкривати	покрывать
overrupt, v	переламати	переломить
oxid, n	окис, оксид	окись, окисел
oxidization, n	окислення, оксидація	окисление, оксидация
oxygen, n	кисень, О	кислород

## P

packing, n	упаковка	упаковка
pain, n	біль, страждання	боль, страдание
painful, adj	болючий, нестерпний	болезненный, мучительный
painless, adj	безболісний, безбольовий	безболезненный, безболевого
palatal, adj,	піднебінний	небный
palate, n	піднебіння	небо
pale, adj	блідий	бледный
paleness, n	блідість	бледность
palliative, n	паліативний,	паллиативный,
	симптоматичний	симптоматический
palpate, v	пальпувати	пальпировать
palpation, n	пальпація, прощупування	пальпация, прощупывание
pamphlet, n	брошура	брошюра
papilla, n	сосок, сосочок, папіла	сосок, сосочек, папилла
paradontium, n	пародонт	пародонт
paraffin, n	парафін	парафин
paraformaldehyde, n	параформальдегід	параформальдегид
parafunction, n	порушення функцій (органа)	нарушение функций (органа)
paralysis, n	параліч, парез	паралич, парез
paranasal	пазухи носа, приносові	пазухи носа, приносовые
sinus, adj+n	пазухи, придаткова	пазухи, придаточная
	пазуха носа	пазуха носа
parenchyma, n	паренхима	паренхима
parenteral, adj	парентеральний	парентеральный
paresis, n	парез, частковий параліч	парез, частичный паралич
paresthesia, n	парестезія	парестезия
parodontitis, n	пародонтит	пародонтит
parodontium, n,	пародонт, амфодонт	пародонт, амфодонт
periostitis, n	періостит (запалення окістя)	периостит (воспаление надкостницы)
parodontium, n,	опорний апарат зуба	опорный аппарат зуба
parodontosis, n	пародонтоз	пародонтоз
parotid gland, adj+n	привушна залоза	околоушная железа



parotitis, n	паротит	паротит
partial, adj	частковий	частичный
particle, n	частка, корпускула	частица, корпускула
parulis, n	гострий одонтогенний періостит, паруліс	острый одонтогенный периостит, паруллис
passage, n	прохід, канал	проход, канал
paste, n	паста, маса	паста, масса
pathogen, adj	хвороботворний, патогенний	болезнетворный, патогенный
pathogenesis, n,	патогенез	патогенез
pathogenetic, adj	патогенетичний	патогенетический
pathologic, adj,	патологічний, болючий, хворобливий	патологический, болезненный
pathalogy, n	патологія	патология
patient, n	пацієнт	пациент
pearl, n	гранула	гранула
pedodontics, n	дитяча стоматологія, стоматологія дитячого віку	детская стоматология, стоматология детского возраста
pellicle, n	шкірочка, кутикула	кожица, кутикула
pemphigus, n	пухирник, пемфігус	пузырчатка, пемфигус
penetration, n	проникнення, пенітрація	проникновение, пенитрация
percuss, v	перкутувати, вистукувати	перкутировать, выстукивать
percussion, v	перкусія, вистукування	перкуссия, выстукивание
perforation, v	перфорація	перфорация
perform, v	здійснювати	осуществлять
perfusion, n	перфузія	перфузия
periapical, adj	приверхівковий, періапікальний	околоверхушечный, периапикальный
pericanalicular, adj	периканалікулярний	периканаликулярный
periodontal abscess, n	альвеолярний абсцес	альвеолярный абсцесс
periodontal disease, adj+n	пародонтопатія	парадонтопатия
periodontal, adj	пародонтальний, періодонтальний, призубний	пародонтальный, периодонтальный, околозубной
periodontics, n	пародонтологія	пародонтология
periodontitis, n,	періодонтит	периодонтит
periodontium, n,	періодонт	периодонт
periodontology, n,	пародонтологія, періодонтологія	пародонтология, периодонтология
perioral, adj	приротовий, періоральний	околоротовой, периоральный
periost, n	окістя, періост	надкостница, периост
periradicular, adj	перирадикулярний	перирадикулярный
perivascular, adj	периваскулярний, присудинний	периваскулярный, околососудистый
perlingual, adj	перлінгвальний	перлингвальный
permanent, adj	тривалий, постійний	длительный, постоянный
permanganate, n	перманганат, марганцевокисла сіль	перманганат, марганцевокислая соль
permeability, n	прохідність, проникність	проходимость, проницаемость

permable, adj	прохідний, проникний	проницаемый
persistence, n	стійкість, персистенція	стойкость, персистенция
pestle, n	товкачик	пест, пестик
petrification, n	петрифікація, скам'яніння	петрификация, окаменение
phagozyte, n	фагоцит	фагоцит
phagozytose, n	фагоцитоз	фагоцитоз
phenol, n	фенол, карболова кислота	фенол, карболовая кислота
phenotype, n	фенотип	фенотип
phlegmon, n	флегмона	флегмона
phologen, adj,	флогогенний, що викликає	флогогенный, вызывающий
	запалення	воспаление
phosphate, n	фосфат	фосфат
phosphatic acid, adj+n	фосфорна кислота	фосфорная кислота
phosphorus, n	фосфор	фосфор
phylogenezis, n,	філогенез	филогенез
philogenetic, adj	філогенетичний	филогенетический
physiatrics, n,	фізіотерапія	физиотерпия
physician, n	врач	врач
physiologic, adj,	фізіологічний, нормальний	физиологический, нормальный
	фізіологія	физиология
physiology, n	фізіологія	физиология
pigment, n	пігмент, фарба	пигмент, краска
pigmentation, n	пігментація	пигментация
pigmented, adj	пігментований	пигментированный
pin, n	штифт, стрижень	штифт, стержень
pin-tooth, n,	штифтовий зуб	штифтовый зуб
pit, n	ямочка	ямочка
plain, adj	чіткий, рівний	ясный, ровный
plaque, n	бляшка, пластинка, наліт	бляшка, пластинка, налет
plaster impression, n	гіпсовий зліпок (відбиток)	гипсовый слепок
plaster, n,	гіпс, сульфат кальцію	гипс, сульфат кальция
plastic, n	пластика, пластик, пластмаса	пластика, пластик, пластмасса
	пластика	пластика
plastics, n	пластика	пластика
plate, n	бляшка, пластинка	бляшка, пластинка
platinum, n	платина	платина
pleasure, n	задоволення	удовольствие
point, n	точка, місце	точка, место, штифт
poison, n	отрута, токсин	яд, токсин
poisonous, adj	отруйний, токсичний	ядовитый, токсический
polishing, n	полірування	полировка
polygenic, adj	полігенний	полигенный
polymer, n	полімер	полимер
polymerization, n	полімеризація	полимеризация
polymeraze, v	полімеризувати	полимеризовать
polymorpho-	поліморф	полиморф
nuclear, adj	поліморфоядерний	полиморфоядерный
polyp, n	поліп	полип
polysaccharide, n	полісахарид	полисахарид
pomphus, n,	пухир	волдырь



porcelain, n	порцеляна	фарфор
poster, n	плакат, постер	плакат
posterior, adj	задній, подальший	задний, последующий
posture, n	поза, стан	поза, состояние
potassium, n	калій, К	калий
potential, n	потенціал, можливість, здатність	потенциал, возможность, способность
powder, n	порошок, пудра	порошек, пудра
practitioner, n	лікар	врач общего профиля
predessor, n	попередник	предшественник
predipose, v	схиляти, привертати	предрасполагать
prefer, v	надавати перевагу	предпочитать
pregnancy, n,	вагітність	беременность
premature birth, adj+n	передчасні пологи	преждевременные роды
premaxilla, n	різцева (міщелепова) кістка	резцовая (межчелюстная) кость
premedication, n	прёмедикація	премедикация
premolar, n,	премоляр, кореневий зуб	премоляр, коренной зуб
premorbid, adj	преморбідний, доклінічний	преморбидный, доклинический
prenatal, adj	пренатальний, допологовий	пренатальный, предродовой
preparation, n	препарування	препарирование
preservation, n	консервація, збереження	консервация, сохранение
pressure, n	тиск	давление
prevalence, n	поширеність, частота	заспространенность, частота
preventive, adj	превентивний, профілактичний	превентивный, профилактический
prick, n	укол, вістря	укол, острие
primary caries, n	первинний карієс	первичный кариес
primer, n	праймер	праймер
priority, n	черговість, передування	очередность, предшествование
prism, n	призма	призма
probe, n v	зонд, датчик, зондувати	зонд, датчик, зондировать
probing, n	зондування	зондирование
process, n	відросток	отросток
progenia, n	прогенія	прогения
prognatic, adj	прогнатичний	прогнатический
prognathism, n	прогнатія	прогнатия
prognose, v,	прогнозувати	прогнозировать
prognosis, n	прогноз, передбачення	прогноз, предсказание
prognostic, adj	прогностичний	прогностический
progression, n	прогресування (наприклад, хвороби)	прогрессирование (например, болезни)
progressive, adj	прогресуючий, наростаючий	прогрессирующий, нарастающий
projection, n	виступ, виріст, проекція	выступ, вырост, проекция
proliferate, v	проліферувати, розростатися	пролиферировать, разрастаться

prominent, adj promote, v	видатний, визначний, відомий сприяти	содействовать, способствовать
properly, adv prophylactic, adj prophy, adj prophylaxis, n propulsion, n	відповідально профілактичний профілактичний профілактика пропульсія, проштовхування	ответственно профилактический профилактический профилактика пропульсия, проталкивание
prosthesis, n, v prosthetic, adj protective shield, adj + n protein, n proteolysis, n	протез, протезування протезний захисний екран  протеїн, білок протеоліз, розщеплення білків	протез, протезирование протезный защитный экран  протеин, белок протеолиз, расщепление белков
proteolitic, adj prothetics, n	протеолітичний ортопедична стоматологія	протеолитический ортопедическая стоматология
protoplasm, n protrude, v protrusion, n provide, v proximal contact, adj+n	протоплазма видаватися, випинатися випинання, протрузія забезпечувати контакт проксимальних поверхонь двох сусідніх зубів статева зрілість виривати кореневий канал зуба захисне покриття пульпи зуба	протоплазма выпячиваться выпячивание, протрузия обеспечивать контакт проксимальных поверхностей двух соседних зубов половая зрелость вырывать корневой канал зуба защитное покрытие пульпы зуба
puberty, n pull out, v pulp canal, n pulp capping, n	умертвіння пульпи зуба, девіталізація пульпа що відноситься до пульпи пульпоектомія пульпіт пульс, биття, імпульс пемза прокол, укол мета нагноєння, нагнивання гній гниття, розклад гнилий, гнильний, , путридний, гнійний піогенний, що викликає нагноєння	умерщвление пульпы зуба, девитализация пульпа относящийся к пульпе пульпэктомия пульпит пульс, биение, импульс пемза прокол, укол цель нагноение гной гниение, разложение гнилой, гниlostный, путридный, гнойный пиогенный, вызывающий нагноение



## Q

quadrant, n	квадрант	квадрант
quality, n	якість	качество
quantity, n	кількість	количество
quarantine, n	карантин, ізоляція	карантин, изоляция
quartz, n	кварц	кварц
quicken, v	прискорювати	ускорять
quick-setting material, adj	швидкозатвердіваючий матеріал	быстроотвердевающий материал

## R

radial, adj	променевий, радіальний	лучевой, радиальный
radiation, n	радіація, випромінення	радиация, излучение
radical, adj n	радикальний; радикал, корінь	радикальный, радикал, корень
radicular, adj	що відноситься до корінця, корінцевий	относящийся к корешку, корешковый
radioactive, adj	радіоактивний	радиоактивный
radiologic, adj,	рентгенологічний, радіологічний	рентгенологический, радиологический
radiology, n	рентгенологія, радіологія	рентгенология, радиология
radiolucent, adj	рентгенопрозорий	рентгенопрозрачный
radiopaque, adj	рентгеноконтраст-ний	рентгеноконтрастный
radius, n	радіус, променева кістка	радиус, лучевая кость
radix, n	корінь (наприклад, язика, зуба)	корень (например, языка, зуба)
raise, v	піднімати, вирощувати	поднимать, растить
ramification, n	розгалуження, відгалуження	разветвление, ответвление
ramus, n	гілка	ветвь
ranula, n	ранула	ранула
rapid caries, n	швидкий карієс, гострий карієс	быстро распространяющийся кариес, острый кариес
rare metal, adj+n	благородний метал, шляхетний метал	благородный металл
rarefaction, n	розрідження, розведення	разрежение, разведение
raw, n	сировина; болюче місце	сырье; ссадина
react, v	реагувати, впливати	реагировать, влиять
reaction, n	реакція, вплив	реакция, влияние
reagent, n	реактив, реагент	реактив, реагент
reamer, n	дрільбор, каналорозширювач	дрельбор, каналорасширитель
reattachment, n	реплантація	реплантация
rebase, v	перебазувати (зубний протез)	перебазировать (зубной протез)
recessive, adj	поглиблений, рецесивний	углубленный, рецессивный
recidivation, n	рецидив	рецидив
reduction, n	зменшення, відновлення	уменьшение, восстановление
refile, v	очищати, удосконалювати	очищать, совершенствовать
reflection, n	відгинання, відбиття (тепла)	отгибание, отражение (тепла)

reflex, n	рефлекс	рефлекс
regard, v	вважати, мати відношення	считать, относиться
regeneration, n	регенерація, відновлення	регенерация, восстановление
region, n	ділянка	участок
regional, adj	регіональний	региональный
registration, n	визначення оклюзійного ) співвідношення (щелеп	определение окклюзионного соотношения (челюстей)
register, v	реєструвати, вносити до реєстру	регистрировать, заносить в реестр
regression, n	регресія, рецидив	регрессия, рецидив
regressive, adj	рецидивний	рецидивный
regular, adj	правильний, нормальний	правильный, нормальный
regulation, n	регуляція, нормування	регуляция, нормирование
regurgitation, n	регургітація	регургитация
rehabilitation, n	реабілітація, відновлення	реабилитация, восстановление
reimplantation, n	реплантація	реплантация
reinfection, n	реінфекція, повторна інфекція	реинфекция, повторная инфекция
reinforced, adj	зміцнений	упроченный
relation, n	відношення, зв'язок, залежність	отношение, связь, зависимость
relationship, n	стосунки, зв'язок	отношение, связь
relief, n	полегшення	облегчение
remain, v	зберігати	сохранять
remedy, n	ліки, медикаментозні засоби	лекарство
remineralization, n	ремінералізація	реминерализация
remission, n	ремісія	ремиссия
remnant, n	залишок	остаток
removable, adj	знімний	съемный
remunerate, v	платити	оплачивать
renal, adj	нирковий	почечный
repair, v	ремонтувати, відновлювати	чинить, восстанавливать
replacement, n	заміна	замена
replantation, n	реплантація	реплантация
reposition, n	репозиція, вправлення	репозиция, вправление
require, v	вимагати, потребувати	требовать, нуждаться
resection, n	резекція, висікання	резекция, иссечение
resemble, v	бути схожим	быть похожим
resident, n	постійний житель, резидент	постоянный житель
residual, adj	резидуальний, залишковий	резидуальный, остаточный
resilience, n	пружність, еластичність	упругость, эластичность
resin, n	смола, пластмаса	смола, пластмасса
resistant, adj	стійкий, міцний	стойкий, прочный
resistance, n	стійкість, резистентність	стойкость, резистентность
resorption, n	всмоктування, ресорбція	всасывание, ресорбция
respiration, n	дихання, вентиляція	дыхание, вентиляция
response, n	відповідь	ответ



rest, n	спокій; кламер	покой, кламмер
restitution, n	відновлення (сил, здоров'я)	восстановление (сил, здоровья)
restore, v	відновлювати	восстанавливать
restiction, n	обмеження	ограничение
retain, v	стримувати, зберігати	удерживать, сохранять
retention, n	ретенція, затримка	ретенция, задержка
retrieve, v	повертати, знаходити	возвращать, обретать
retraction, n,	ретракція, стягування	ретракция, стягивание
retrogenia, n	ретрогенія	ретрогения
retrognathia, n	ретрогнатія (аномалія )	ретрогнатия (аномалия
	прикусу	прикуса)
retrograde, adj	ретроградний,	ретроградный,
	дегенеративний	дегенеративный
retrusion, n	зміщення (нижньої щелепи)	смещение (нижней челюсти)
		кзади
reveal, v	відкривати, виявляти	открывать, обнаруживать
reversible, adj	зворотній	обратимый
rhagade, n	тріщини на шкірі	трещины на коже
rhapehe, n	шов, лінія зрощення	шов, линия сращения
ridge, n	гребінь, борозна	гребень, борозда
rigid, adj	жорсткий, суворий,	жетский, строгий,
	стійкий	устойчивый
rim, n	обідок, край	ободок, край
rinse, v	промивати, полоскати	промыть, полоскать
rod, n	стержень	стержень
roentgenize, v	робити рентгенівський	делать рентгеновский
	знімок	снимок
roentgenogram, n	рентгенівський знімок,	рентгеновский снимок,
	рентгенограма	рентгенограмма
roentgenography, n	рентгенографія	рентгенография
roof, n	верхня стінка (порожнини)	верхняя стенка (полости)
room, n	місце, простір	место, пространство
root canal, n+n	кореневий канал (зуба)	корневой канал (зуба)
root caries, n+n	карієс кореня зуба	кариес корня зуба
root, n	корінь, корінець	корень, корешок
rostral, adj	дзьобовидний, ростральний	клювовидный, ростральный
rotary, adj	обертальний	вращательный
rotation, n	обертання, ротація	вращение, ротация
rottenness, n,	гниття	гниение
rubber, n	гума, гумка	резина, резинка
rudimentum, n	залишковий орган,	остаточный орган, рудимент
	рудимент	
rupture, n	розрив, прокол, прорив	разрыв, прободение

## S

saccharose, n	сахароза	сахароза
safe, adj	безпечний	безопасный
saggital, adj	сагітальний	саггитальный
salary, n	зарплата	зарплата

saline, adj	соляний, солоний	солевой, солёный
saliva, n	слина	слюна
salivary gland, adj+n	слинна залоза	слюнная железа
salivation, n	слиновиділення, саливація	слюноотделение, саливация
salt, n	сіль	соль
salt peter, n	селітра	селитра
sanatorium, n	санаторій, курорт	санаторий, курорт
sand, n	пісок, конкременти	песок, конкременты
sandblasting, adj+n	піскоструйна обробка	пескоструйная обработка
sanitation, n	санація, оздоровлення	санация, оздоровление
sarcoma, n	саркома	саркома
saturation, n	насичення, сатурація	насыщение, сатурация
save, v	рятувати	спасать
saw, n	пила, пилка	пила, пилка
scale, n	розмір, масштаб	размер, масштаб
scalpel, n	скальпель, секційний ніж	скальпель, секционный нож
scar, n	рубець, шрам	рубец, шрам
scheme, n	схема, контур	схема, контур
screw, n	гвинт	винт
scrub, v	чистити, зчищати	чистить, счищать
scissors, Pl	ножиці	ножницы
sclera, n	склера	склера
sclerosis, n	склероз	склероз
scour, n	чищення, відтирання	чистка, оттирание
scrap away, v	викидати	выбрасывать
scull, n	череп	череп
scurvy, n	скорбут, цинга	скорбут, цинга
sealer, n	герметик	герметик
second	зміна зубів	смена зубов
dentition, adj+n		
secondary	вторинний карієс	вторичный кариес
caries, adj+n		
secondary	вторинний дентин	вторичный дентин
dentin, adj+n		
secondary	вторинна (подальша)	вторичное (последующее)
hemorrhage, adj+n	кровотеча	кровотечение
secrete, n	секрет	секрет
secretion, n	секреція, виділення	секреция, выделение
secretory, adj	секреторний, видільний	секреторный, выделительный
sedative, n	заспокійливий (седативний) засіб	успокаивающее (седативное) средство
sediment, n	осад	осадок
segment, n	сегмент	сегмент
senile, adj	старечий	старческий
senium, n	старість	старость
sensation, n	відчуття	ощущение
sensation, n	відчуття, чуття	ощущение,
sensibility, n	чутливість	чувствительность
sensibilization, n	сенсibiliзація	сенсibilизация
sensible, adj	чуттєвий, чутливий, відчутний	чувствительный, осязательный



separating, adj	що розділяє	разделяющий
sepsis, n	сепсис	сепсис
septic, adj	септичний	септический
septum, n	перегородка	перегородка
sequence, n	послідовність	последовательность
sequester, n	секвестр (ділянка некротизованої тканини)	секвестр (участок некротизированной ткани)
sequestration, n	секвестрація, ізоляція	секвестрация, изоляция
series, n	серія, ряд	серия, ряд
serotype, n	серотип (наприклад, віруса)	серотип (например, вируса)
seroys, adj	серозний	серозный
serum, n	сироватка	сыворотка
set, n	набір	набор
set hard, v	затвердівати	затвердевать
severe, adj	важкий, сильний	тяжелый, сильный
sex, n	стать, рід	пол, род
shade, n	відтінок	оттенок
shake, v	трясти, струшувати	трясти, встряхивать
shape, n	форма, зразок, модель	форма, образец, модель
sharp, adj	гострий	острый
shed, v	втрачати, губити	терять
shock, n	шок	шок
shoulder, n	уступ (препарованого зуба)	уступ (препарированного зуба)
shrink, v	стискатися	сжиматься
shrinkage, n	усадка	усадка
sialadenitis, n	сіалодент (запалення слинної залози)	сиалоаденит (воспаление слюнной железы)
sialadenography, n	сіалoadенографія, сіалoграфія	сиалоаденография, сиалография
sialolith, n	слинний конкремент	слюнной конкремент
side, n	сторона, бік	сторона, бок
sigmatism, n	сигматизм	сигматизм
silicofluoride, n	кремнію фторид	кремния фторид
silicone, n	силікон	силикон
silver, n	срібло, Ag	серебро
similar, adj	схожий, подібний	подобный
simple, adj	простий, нескладний	простой, несложный
simulation	симуляція (хвороби), моделювання	симуляция (болезни), моделирование
single, adj	єдиний	единственный
sinus, n	синус, пазуха, порожнина	синус, пазуха, полость
sinusitis, n	синусит	синусит
situation, n	ситуація, становище, стан	ситуация, обстановка, состояние
skeleton, n	скелет	скелет
skill, n	навичка	навык
skin, n	шкіра, оболонка, плівка	кожа, оболочка, пленка
sleeve, n	гільза, патрон	гильза, патрон
slight, adj	слабкий	слабый

small forceps, adj+n,	пінцет	пинцет
smear, n	мазок	мазок
smell, n	запах, нюх	запах, нюх
smooth, adj	гладкий, рівний, ковзкий	гладкий, ровный, скользкий
snack, n	закуска	закуска
socket, n	кишеня	карман
soda, n	харчова сода, бікарбонат натрію, вуглекислий натрій	пищевая сода, бикарбонат натрия, углекислый натрий
soft, adj	м'який	мягкий
solder, v	паяти, спаювати	паять
soft palate, adj+n	піднебінна запона	небная занавеска
solid, adj	міцний, твердий, стійкий, щільний	прочный, твердый, устойчивый, плотный
solitary, adj	окремий, відокремлений	отдельный, обособленный
solution, n	розчин	раствор
sour, adj, acid, adj	кислий	кислый
source, n	джерело	источник
spasm, n	спазм, судорога, корч	спазм, судорога
spatula, n	шпатель, лопаточка	шпатель, лопаточка
species, n	вид, рід	вид, род
specific, adj	особливий, специфічний	особый, специфичный
specificity, n	специфічність	специфический
speculum, n	дзеркало	зеркало
speech, n	мова, мовлення	язык, речь
sphenoid bone, n+n	основна клиноподібна кістка	основная клиновидная кость
spirit, n	спирт, спиртовий розчин	спирт, спиртовой раствор
spit out, v	сплюнути	сплюнуть
splint, n	шинувальна стрічка	шинирующая лента
splinting, n	шинування	шинирование
spontaneous, adj	спонтанний, самовільний	спонтанный, самопроизвольный
spoon, n	ложка	ложка
sporadic, adj	спорадичний, поодинокий	спорадичный, единичный
spot, n, stain, n	пляма	пятно
spray, v	розбризкувати	разбрызгивать
spread, v	поширювати(ся), покривати шаром	распространять, покрывать слоем
spring, n	пружина	пружина
squeeze, v	стискати, здавлювати	сжимать, сдавливать
stability, n	стійкість, стабільність	стойкость, стабильность
stabilization, n	стабілізація	стабилизация
stable, adj	стійкий, стабільний	стойкий, стабильный
stagnation, n,	зупинка, застій	остановка, застой
stain, n	забарвлення, пляма	окраска, пятно
stamp, v	штампувати	штамповать
standart, n	стандарт, норма	стандарт, норма
staphylococcus, n	стафілокок	стафилококк
stasis, n	стаз, застій	стаз, застой
state, n	результат (обстеження хворого); стан, статус	результат (обследования больного); состояние, статус



stay, v	залишатися	оставаться
steel, n	сталь	сталь
stenosis, n	стеноз, стриктура	стеноз, стриктура
stereognosis, n	стереогноз, просторова чутливість	стереогноз, пространственная чувствительность
sterile, adj	стерильний, стерилізований	стерильный, стерилизованный
sterilization, n	стерилізація, знезаражування	стерилизация, обеззараживание
sterilize, v	стерилізувати, знезаражувати	стерилизовать, обеззараживать
stethoscope, n	стетоскоп	стетоскоп
stick, v	прилипати, приклеюватися	прилипать, приклеиваться
sticky, adj	липкий	липкий
stimulate, v	стимулювати	стимулировать
stimulation, n	стимуляція	стимуляция
stomatitis, n	стоматит	стоматит
stomatological, adj	стоматологічний	стоматологический
stomatology, n	стоматологія	стоматология
stomatoscope, n	стоматоскоп	стоматоскоп
stone, n	камінь	камень
straighten, v	випрямляти, приводити в порядок	распрямлять, приводит в порядок
strength, n	міцність	прочность
streptococcus, n	стрептокок	стрептокок
stress, n	стрес, напруження	стресс, напряжение
stress bearing, n+adj	що несуть навантаження	несущие нагрузку
stress absorbing, n+adj	стрес, абсорбуючий	стресс, абсорбирующий
strip, n	смуга, стрічка	полоса, лента
structural, adj	структурний, конструктивний	структурный, конструктивный
structure, n	будова, структура	строение, структура
stump, n	культя	культя, обрубок
subacute, adj	підгострий (наприклад, про перебіг хвороби)	подострый (например о течении болезни)
subgingival calculus, adj+n	під'ясневий зубний камінь	поддесневой зубной камень
subgingival, adj	під'ясневий	поддесневой
subject, n v	суб'єкт, особа; підкоряти, підлягати, піддавати	субъект, лицо; подчинять, подвергать
subjective, adj	суб'єктивний	субъективный
sublingual, adj	під'язиковий	подъязычный
subluxation, n	неповний вивих	неполный вывих
submandibular, adj	підщелеповий	подчелюстной
submarginal, adj	розташований біля краю	расположенный у края
substance, n	речовина, матеріал	вещество, материал
substitute, v	заміщати	замещать
substitution, n	заміна, заміщення	замена, замещение
substrate, n	субстрат, живильне середовище	субстрат, питательная среда

succedaneous tooth, adj+n	зубний (незнімний) протез	зубной (несъемный) протез
successor, n	послідовність	последователь
suck, v	смоктати (палець)	сосать (палец)
suffice, v	хапати, задовольняти	хватать, удовлетворять
sugar, n	цукор	сахар
sulfate, n	сульфат	сульфат
sulfide, n	сульфід	сульфид
sulfur, n	сірка, S	сера
sulfuric acid, adj+n	сірчана кислота	серная кислота
superficial, adj	поверхневий, неглибокий	поверхностный, неглубокий
superinfection, n	суперінфекція	суперинфекция
suppression, n	пригнічення	угнетение, подавление
supragingival calculus, n	над'ясневий зубний камінь	наддесневой зубной камень
supragingival, adj	над'ясневий	наддесневой
surface, n	поверхня	поверхность
surface anesthesia, n+n	поверхнева анестезія	поверхностная анестезия
surgery, n	хірургія	хирургия
surgical, adj	хірургічний	хирургический
surround, v	оточувати	окружать
survive, v	виживати	выживать
suture, n v	шов, накладання шва	шов, наложение шва
swallow, v	ковтати, проковтувати	глотать, проглатывать
swollen, p.p	випуклий,	выпуклый, припухший
symbiosis, n	симбіоз	симбиоз
symmetrical, adj	симетричний	симметрический
symptom, n	симптом, ознака хвороби	симптом, признак болезни
symptomatic, adj	симптоматичний	симптоматический
synalgia, n	реперкусійний біль	реперкуссиянная боль
synapse, n	синапс	синапс
synchronous, adj	синхронний, одночасний	синхронный, одновременный
syndesmosis, n	синдесмоз	синдесмоз
syndrome, n	синдром,	синдром,
	симптоматоккомплекс	симптоматоккомплекс
synergic, adj,	синергійний,	синергический, совместно
	спільно діючий	действующий
synostosis, n	синостаз, зрощення кісток	синостаз, сращение костей
synthesis, n	синтез, об'єднання	синтез, соединение
synthesize, v	синтезувати	синтезировать
synthetic, adj	синтетичний	синтетический
syringe, n	шприц	шприц
system, n	система, апарат	система, аппарат
systematic, adj	систематичний	систематический
systemic, adj	системний, загальний	системный, общий

## Т

tactile, adj	тактильний, дотиковий	тактильный, осязательный
talc, n	тальк	тальк



tampon, v	тампонувати	тампонировать
tamponade, n	тампонада	тампонада
tartar, n	зубний камінь	зубной камень
taste, n	смак, відчуття смаку	вкус, чувство вкуса
technical	спеціальний вираз,	специальное выражение,
term, adj+n	технічний термін	технический термин
teenager, n	підліток	подросток
teething, n	прорізування зубів,	прорезывание зубов,
	дентиція	дентиция
tegument, n	оболонка, зовнішній покрив	оболочка, наружный покров
temper, v	відпускати, гартуватись	отпускать, закаляться
temperature, n	температура	температура
temporary, adj	тимчасовий	временный
temporo-maxillary	скронево-верхньоще-	височно-верхнечелюстной
joint, adj+n	лепний суглоб	сустав
tendon, n	сухожилля, сухожилок	сухожилие
teratology, n	тератологія, анатомія	тератология, анатомия
	розвитку	развития
terminology, n	термінологія, номенклатура	терминология, номенклатура
tertiary, adj	третинний	третичный
test, n	тест, проба, аналіз	тест, проба, анализ
tetanic, adj	титанічний, правцевий	титанический, столбнячный
therapeutic, adj	лікувальний, терапевтичний	лечебный, терапевтический
therapy, n	лікування, терапія	лечение, терапия
thermic, adj	тепловий, термічний	тепловой, термический
thermometry, n	термометрія	термометрия
thick, adj	товстий, густий	толстый, густой
thin, adj	тонкий, рідкий, дрібний	тонкий, жидкий, мелкий
threefold, adj	триразовий, триадний	трехкратный, триадный
throughout, adv	в усіх відношеннях	во всех отношениях
thrush, n	кандидозний стоматит	молочница, кандидозный стоматит
thrust, n v	поштовх, удар; штовхати, сунути	толчок, удар; толкать, совать
tilt, n	відкіс, нахил, навантаження	откос, наклон, нагрузка
tin, n	олово, Sn	олово
tiny, adj	крихітний	крошечный
tissue, n	тканина	ткань
toddler, n	прогульник	прогульщик
tomography, n	томографія	томография
tongue, n	язик	язык
tonsil, n	піднебінний мигдалик	небная миндалина
tooth ache, n	зубний біль	зубная боль
tooth axis, n+n	зубна вісь	зубная ось
tooth brush, n+n	зубна щітка	зубная щетка
tooth cement, n	цемент зуба	цемент зуба
tooth shape, n+n	форма зуба	форма зуба
tooth socket, n+n	зубна альвеола,	зубная альвеола,
	зубна ямка	зубная лунка
tooth, n	зуб, зубець (на ЕКГ)	зуб, зубец (на ЭКГ)

tooth paste, n	зубна паста	зубная паста
tooth pick, n	зубний зонд	зубной зонд
toothless, adj	беззубий	беззубый
torsion, n	обертання, кручення	вращение, кручение
torus, n	торус, випуклість	торус, выпуклость
totally, adv	у цілому	в целом
tough, adj	в'язкий, пружний, стійкий	вязкий, упругий, стойкий
toxic, adj	токсичний	токсический
toxin, n	токсин	токсин
trabecula, n	трабекула, балочка	трабекула, балочка
transfixion, n	проколювання	прокалывание
transfusion, n	переливання крові	переливание крови
transillumination, n	просвічування, рентгеноскопія	просвечивание, рентгеноскопия
translucent, adj	(напів)прозорий	(полу)прозрачный
transparency, n	прозорість	прозрачность
transparent, adj	просвітлення, освітлення, прозорий	просветление, осветление, прозрачный
transplant, n	трансплантат	трансплантат
transplant, v	трансплантувати, пересаджувати	трансплантировать, пересаживать
transplantation, n	трансплантація, пересадка	трансплантация, пересадка
transposition, n	транспозиція	транспозиция
transverse, adj	поперечний, скісний	поперечный, косой
trap, n	дренажна трубка, ловушка	дренажная трубка, ловушка
trauma, n	травма, ушкодження	травма, повреждение
traumatic, adj	травматичний	травматический
tray, n	відбиткова ложка	оттискная ложка
trigeminus, n	трійчастий нерв	тройничный нерв
trim, n v	порядок, пристосовуватися	порядок, приспособливаться
trophicity, n	трофіка, живлення тканини	трофика, питание ткани
trouble, n	неприємність	неприятность
troublesome, adj	що завдає неприємності	приносящий неприятности
try-in, n	припасування (коронки, мосту)	припасовка (коронки, моста)
tube, n	труба, трубка, тубик	труба, трубка, тубик
tuber, n	горб	бугор
tubercle, n	туберкульозний горбик	туберкулезный бугорок
tumor, n	пухлина, бластома, неоплазма, новоутворення	бластома, неоплазма, опухоль, новообразование
tungsten, n	вольфрам	вольфрам
turn, v	обертати, повертати, вертати	вращать, поворачивать, вертеть
twinning, n	розділення на дві симетричні частини	разделение на две симметричные части
twist, v	повернути	повернуть

## U

ulcer, n	виразка	язва
ulceration, n	утворення виразки	образование язвы



ulcerative, adj	виразковий, виразкуючий	язвенный, изъязвленный
ultraviolet, adj	ультрафіолетовий	ультрафиолетовый
undergo, v	проходити, зазнавати	проходить, претерпевать
undermine, v	руйнувати, підривати (здоров'я)	разрушать, подрывать (здоровье)
undernourishment, n	знижене харчування, недоїдання	пониженное питание, недоедание
undertake, v	вдаватися	предпринимать
untoward, adj	несприятливий (про прогноз)	неблагоприятный (о прогнозе)
upper, adj	верхній	верхний
urea, n	сеча, сечовина	моча, мочеви́на
uvula, n	піднебінний язичок	небный язычок

## V

vacuum, n	вакуум, порожнина	вакуум, пустота
valency, n	валентність	валентность
value, n	цінність	ценность
valuable, adj	цінний	ценный
variability, n	мінливість, непостійність	изменчивость, непостоянство
variable, n	мінливий, непостійний	изменчивый, непостоянный
variation, n	варіація, мінливість	вариация, изменчивость
varnish, n	лак	лак
vascular, adj	васкулярний, судинний	васкулярный, сосудистый
vasoconstrictive, adj	судиннозвужуючий	сосудосужающий
vasodentine, n	вазодентин, припульпарний дентин	вазодентин, околопульпарный дентин
vasodilatative, adj	судиннорозширюючий	сосудорасширяющий
vast, adj	поширений	обширный
vein, n	вена	вена
velum, n	оболонка, капсула	оболочка, капсула
veneering system, n	система для облицювання	система для облицовки
vertebra, n	хребець	позвонок
vertical destruction, n	вертикальне руйнування	вертикальное разрушение
vertical dimension, n	висота прикусу, межальвеолярна висота	высота прикуса, межальвеолярная высота
vesicle, n	везикула, пухирець	везикула, пузырек
vessel, n	судина	сосуд
vestibular, adj	вестибулярний, пристінковий	вестибулярный, преддверный
vestibule, n	передстінок	преддверие
vibration, n	вібрація, коливання	вибрация, колебание
vicious, adj	неправильний, помилковий	неправильный, ошибочный
vigorously, adv	дуже, бадьоро	сильно, бодро
viral, adj	вірусний	вирусный
virulence, n	вірулентність, отруйність	вирулентность, ядовитость
virulent, adj	вірулентний, отруйний	вирулентный, ядовитый
virus, n	вірус	вирус
viscous, adj	в'язкий, клейкий	вязкий, клейкий
viscosity, n	в'язкість, клейкість	вязкость, клейкость

visible, adj	видимий	видимый
visual, adj	зоровий, візуальний	зрительный, визуальный
vital, adj	вітальний, життєздатний	витальный, жизнеспособный
vitality, n	життєздатність	жизнеспособность

## W

wall, n	стінка	стенка
wandering, n	блукання	блуждение
warm, adj	теплий	теплый
warmth, n	теплота, тепло, температура	теплота, тепло, температура
warm, v	запобігати	предупреждать
wax, n	віск	воск
weak, adj	дебільний, недоумкуватий	дебильный, слабоумный
wear, v	носити	носить
wearing out, n+	узура	узура
weld, vt	зварювати	сваривать
wetability, n	зволоження	смачиваемость, увлажнение
white flour, adj + n	біла мука	белая мука
wipe, v	промокати	промокать
wire, n	провід	провода
wisdom tooth, n	зуб мудрості	зуб мудрости
withdraw, v	відходити,	отходить, изымать
withstand, v	витримувати	выдерживать
wrap, v	загортати, обгортати	завертывать, обертывать
wrong, adj	неправильний, хибний	неправильный, ложный

## X

X-ray, n	рентгенівські промені	рентгеновский луч
xerostomia, n	ксеростомія, сухість в роті	ксеростомия, сухость во рту

## Y

yawn, n	зівота	зевота
yellowish, adj	жовтуватий	желтоватый

## Z

zone, n	зона, область	зона, область
zygomatic bone, adj+n	вилична кістка	скуловая кость



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## АНГЛІЙСЬКА МОВА (ПРАКТИЧНИЙ КУРС ДЛЯ СТУДЕНТІВ СТОМАТОЛОГІЧНОГО ФАКУЛЬТЕТУ) ПІДРУЧНИК

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