

МАТЕРИАЛЫ
ПО АНГЛИЙСКОМУ ЯЗЫКУ
ДЛЯ СТУДЕНТОВ 1 КУРСА
ЛЕЧЕБНОГО И ПЕДИАТРИЧЕСКОГО ФАКУЛЬТЕТОВ

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UNIT I. LEARNING TO DISCUSS A MEDICAL TEXT

Lesson 1. IVANOVO STATE MEDICAL ACADEMY

I. Read and learn the following words

1. to enter ['entə] *v* – поступать
2. academy [ə'kædəmɪ] *n* – академия
academic [ˌækə'demɪk] *adj* – учебный, академический
3. to be founded [faʊndɪd] *v* – быть основанным
4. to train [treɪn] *v* – обучать, подготавливать
5. faculty ['fækəltɪ] *n* – факультет
6. general medicine [dʒenərəl 'med(ɪ)sɪn] – терапия, лечебное дело
7. pediatrics [ˌpi:di'ætrɪks] *n* – педиатрия
8. preparatory [prɪ'pærətəri] *adj* – подготовительный
9. postgraduate course [ˌpəʊst'grædʒuət kɔ:s] – аспирантура, послевузовское образование
10. to direct [d(a)ɪ'rekt] *v* – руководить
11. dean [di:n] *n* – декан
12. department [dɪ'pɑ:tmənt] / chair [tʃeə] *n* – кафедра
13. associate professor [ə'səʊʃɪt prə'fesə] *n* – доцент
14. to include [ɪn'klu:d] *v* – включать
15. lecture ['lektʃə] *n* – лекция
16. science ['saɪəns] *n* – наука
17. laboratory [lə'bɒrətəri] *n* – лаборатория
18. library ['laɪbrəri] *n* – библиотека
19. to attend [ə'tend] *v* – посещать
attendance [ə'tendəns] *n* – посещение
20. compulsory [kəm'pʌlsəri] *adj* – обязательный
21. to master ['mɑ:stə] *v* – овладевать, совершенствоваться
22. physics ['fɪzɪks] *n* – физика
23. chemistry ['kemɪstri] *n* – химия
24. biology [baɪ'ɒlədʒɪ] *n* – биология
25. histology [hɪs'tɒlədʒɪ] *n* – гистология
26. anatomy [ə'nætəmi] *n* – анатомия
27. physiology [ˌfɪzɪ'ɒlədʒɪ] *n* – физиология
28. senior students ['si:njə 'stju:dənts] – старшекурсники
29. special ['speʃəl] *adj* – специальный
30. surgery ['sɜ:dʒəri] *n* – хирургия
31. gynaecology [ˌɡaɪni'kɒlədʒɪ] *n* – гинекология
32. pharmacology [ˌfɑ:mə'kɒlədʒɪ] *n* – фармакология
33. neurology [njʊə'ɒlədʒɪ] *n* – неврология
34. scientific research work [ˌsaɪəntɪfɪk ri'sɜ:ʃ wɜ:k] – научно-исследовательская работа
35. skills *n* – навыки, умения
36. to practice ['præktɪs] *v* – практиковать
37. nurse [nɜ:s] *n* – медсестра
38. to diagnose ['daɪəgnəʊz] *v* – диагностировать
39. procedure [prə'si:dʒə] *n* – процедура
40. term [tɜ:m] *n* – семестр
41. test *n* – 1) зачет; 2) тест, анализ
42. to complete [kəm'pli:t] *v* – завершать
43. oath [əʊθ] *n* – клятва
44. graduate ['grædʒuət] *n* – выпускник
45. physician [fɪ'zɪʃən] *n* – врач, терапевт
46. primary care physician ['praɪməri keə fɪ'zɪʃən] – врач-терапевт
47. field [fi:ld] *n* – область, сфера, поле
48. specialization [ˌspeʃəlaɪ'zeɪʃən] *n* – специализация
49. resident ['rezɪdənt] *n* – ординатор
50. to research [ri'sɜ:ʃ] *v* – исследовать

II. Read and translate the following text

IVANOVO STATE MEDICAL ACADEMY



Every year hundreds of young people come from different parts of our country and from abroad to enter Ivanovo State Medical Academy. Candidates with the highest grades become students.

Our Academy was founded in 1930 by V.G.Belov and about one hundred students studied there. Now about 2000 students are trained at the Academy. There are 3 basic faculties (the faculties of general medicine, pediatrics, stomatological (dental)) as well as a preparatory one and a postgraduate course for doctors. The course of study at the dental faculty is 5 years and at the other faculties it is 6 years.

The rector and pro-rectors are at the head of the Academy. The work of the faculty is directed by the dean's office with the dean at the head. The academy has more than 50 departments (chairs). The head of the department is a professor or an associate professor. The teaching staff of the Academy includes mainly Candidates of Science and Doctors of Science.

There are different forms of study at the academy. The students attend lectures, have practical classes, seminars, work in the laboratories and libraries. Attendance of practical classes is compulsory. They spend some time in different class-rooms, working on their own. During the first two years of studies the students master the preclinical subjects: physics, chemistry, biology, histology, anatomy, physiology and others. The senior students study special medical subjects: general medicine, surgery, gynaecology, pharmacology, neurology and others. They must also do scientific research work.

Practical skills are very important for future doctors. In their third, fourth and fifth years the students practice these skills at the hospitals and polyclinics. They work as nurses and doctors' assistants. They learn to diagnose and do different procedures and tests.

There are 2 terms in every academic year. At the end of the term the students have several tests and take some exams. After completing a full course of studies, the medical students take state examinations in clinical and special subjects and after that the students get their diplomas. They also take the Oath of a Physician of Russia.

After getting the diploma graduates must work in their field of specialization as primary care physicians for 3 years and then as residents for 2-5 years. Then medical graduates may take the postgraduate course and research problems of modern medicine.

III. Translate the following word combinations and learn them

- | | |
|---------------------------------------|---|
| 1. the highest grades | 12. practical skills |
| 2. the course of study | 13. preclinical [pri:'klɪnɪkəl] subjects |
| 3. basic ['beɪsɪk] faculties | 14. academic year |
| 4. preparatory faculty | 15. to have tests |
| 5. the faculty of general medicine | 16. to complete a full course of studies |
| 6. dean's office | 17. to take state examinations
[ɪg,zæmɪ'neɪʃənz] |
| 7. the head [hed] of the department | 18. the Oath of a Physician of Russia |
| 8. teaching staff [stɑ:f] | 19. in the field of specialization |
| 9. Candidate ['kændɪdeɪt] of Sciences | 20. to take the postgraduate course |
| 10. to attend lectures | 21. to research problems of medicine |
| 11. to work on one's own [əʊn] | |

IV. Read the following numerals (numbers and dates) correctly

- a) 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 30; 40; 50.
b) 10; 70; 100; 150; 200; 230; 500; 1000; 1500; 2000; 2180; 3900; 4690; 5960.
c) 1930; 1941; 1945; 1961; 1980; 1993; 1999; 2000; 2003; 2008; 2012; 2018.
d) 1st; 2nd; 3rd; 4th; 5th; 6th; 10th.

V. Guess the missing words and fill in the gaps

1. You have entered ..., which was founded in
2. There are three basic ... at the Academy.
3. The course of study at the is 5 years but at the other faculties it is ... years.
4. The work of the department (chair) is directed by
5. The studies in the senior years are devoted to ... subjects: surgery, ..., .., etc.
6. are very important for future doctors.
7. Senior students ... much time at the ... and
8. At the hospitals students learn to ... and do
9. At the end of the ... the students have several and take some
10. Medical students take ... examinations after completing ...
11. Graduates must work as ... for ... or as ... from two to five years.
12. Graduates ... problems of in postgraduate course.

VI. Agree or disagree with the statements using the following expressions

Positive meaning: *It's true; It's really so; I quite agree with you; That's right; I'm of the same opinion.*

Negative meaning: *I disagree; Surely not; Far from it; Nothing of the kind; Of course, not.*

1. Our Academy was founded in 1940.
2. The Academy has 5 faculties.
3. There are only 2 main faculties at the Medical Academy.
4. The course of study at the dental faculty is 6 years.
5. The rector and professors are at the head of the Academy.

6. Each faculty is headed by the Dean.
7. Each department is headed by a professor or an associate professor.
8. Attendance of practical classes is voluntary.
9. During the first two years the students master the special medical subjects.
10. At the end of each term the students have several tests.
11. Senior students practise their skills at the post-offices and museums.
12. After getting their diplomas graduates take the Hippocratic Oath.

VII. Answer the questions

1. What subjects are necessary to be taken to enter our academy?
2. What is your favourite subject?
3. What subject is the most difficult for you?
4. What faculty do you study at?
5. What doctor do you want to become?
6. Do you attend lectures regularly?
7. What subjects involve laboratory works?
8. How many years will it take you to graduate from the academy?
9. Where are you planning to have your summer medical practice?

VIII. Match the words with opposite meaning

1. compulsory	a. theoretical
2. practical	b. junior
3. to get	c. to complete
4. high	d. voluntary
5. senior	e. special medical
6. to teach	f. ancient
7. to begin	g. old
8. modern	h. to learn, to study
9. young	i. to give
10. preclinical	j. low

IX. Match the words from both columns to form word combinations

1. highest	a. faculties
2. basic	b. course
3. general	c. professor
4. post-graduate	d. work
5. dean`s	e. medicine
6. associate	f. subjects
7. teaching	g. examination
8. preclinical	h. office
9. state	i. grades
10. research	j. staff

X. Translate the sentences paying attention to the verbs *to study, to learn, to teach, to train*

1. Today I will learn a new grammar rule in English. 2. What do you do? – I teach biology. 3. They trained the young doctor to use this new apparatus. 4. I learned to speak English fluently. 5. Are you studying or working now? – I am working. 6. Live and learn! 7. Students are training their practical skills at the polyclinic now. 8. Who taught you to do medical procedures? 9. Yesterday we learned that a group of foreign students came to our Academy. 10. The first year students don't study clinical subjects. 11. We need to train more nurses. 12. She studied very hard at school.

XI. Compose sentences from the words below

1. faculties, are, three, there, basic, at the academy
2. years, dental, five, students, study
3. is, to study, at, difficult, the medical, it, academy
4. the faculty, at, the dean, is, the head, of
5. at, master, students, practical, the hospitals, their, skills
6. term, at, have, the end, each, students, of, tests and exams
7. year, there, terms, in, are, 2, the, academic
8. diplomas, after, students, the, state, get, examinations, their
9. physicians, must, primary, graduates, as, care, work, for 3 years
10. research, must, postgraduates, a, scientific, write, work

XII. Render the following sentences in English

1. Наша академия была основана в 1930 году московским врачом Василием Григорьевичем Беловым.
2. Абитуриенты с наивысшими баллами становятся студентами.
3. В академии три основных факультета.
4. Курс обучения на стоматологическом факультете составляет 5 лет, а на остальных – 6 лет.
5. Ректор и проректоры возглавляют академию.
6. Факультетом руководит декан, а кафедрой – заведующий кафедрой.
7. Студенты посещают лекции и самостоятельно выполняют практические работы в лабораториях.
8. Первые два года студенты изучают доклинические предметы.
9. На старших курсах студенты совершенствуются в клинических дисциплинах, таких как терапия, хирургия, акушерство и гинекология и т.д.
10. Старшекурсники отрабатывают (практикуют) свои навыки в больницах и поликлиниках, где они выполняют работу медсестер и помогают врачам.
11. В конце каждого семестра студенты сдают зачеты и экзамены.
12. По завершению курса обучения студенты сдают государственные экзамены, получают дипломы и дают клятву врача.
13. Выпускники-медики работают участковыми врачами 3 года или учатся в ординатуре.

Control questions

1. What are the main faculties and the duration of study at the Academy?
2. Who is at the head of the Academy, its faculties and departments (chairs)?
3. What are the forms of study at the Academy?
4. What subjects are studied during pre-clinical and clinical years?
5. Where do the students acquire practical skills of future doctors?
6. When do the students take tests and examinations at the Academy?
7. What do the students do after getting their diplomas?

Lesson 2. MEDICAL EDUCATION IN GREAT BRITAIN

I. Read and learn the following words

- | | |
|---|---|
| 1. application [ˌæplɪˈkeɪʃən] <i>n</i> –
заявление | 22. undergraduate [ˌʌndəˈgrædʒuɪt] <i>n</i> –
студент последнего курса |
| 2. experience [ɪkˈspɪ(ə)rɪəns] <i>n</i> – опыт | 23. in-patient department [ˈɪnpeɪʃnt
dɪˈpɑːtmənt] – стационар |
| 3. to admit [ədˈmɪt] <i>v</i> – принимать | 24. out-patient department – поликлиника,
амбулаторное отделение |
| 4. free of charge [tʃɑːdʒ] – бесплатный | 25. to follow up [ˈfɒləʊ ʌp] <i>v</i> –
наблюдать, вести (пациентов) |
| 5. grant [grɑːnt] <i>n</i> – стипендия | 26. ward [wɔːd] <i>n</i> – (больничная) палата |
| 6. to divide [dɪˈvaɪd] <i>v</i> – делить(ся) | 27. academic and practical problems –
теоретические и практические вопросы |
| 7. duration [ˈdjʊˈreɪʃən] <i>n</i> –
продолжительность | 28. finals [ˈfaɪnlz] <i>n</i> – выпускные
экзамены |
| 8. to last [lɑːst] <i>v</i> – длиться,
продолжаться | 29. obstetrics <i>n</i> – акушерство |
| 9. to consist of [ˈkɒnsɪst əv] <i>v</i> –
состоять из | 30. to obtain [əbˈteɪn] <i>v</i> – получать |
| 10. basic sciences [ˈbeɪsɪk ˈsaɪənsɪz] –
основополагающие науки | 31. degree [dɪˈɡriː] <i>n</i> – степень |
| 11. biochemistry [ˌbaɪəʊˈkemɪstri] <i>n</i> –
биохимия | 32. Bachelor [ˈbætʃ(ə)lə] of Medicine /
Surgery – бакалавр медицины/ хирургии |
| 12. statistics [stəˈtɪstɪks] <i>n</i> – статистика | 33. graduation [ˌgrædʒuˈeɪʃən] <i>n</i> –
окончание высшего учебного заведения |
| 13. genetics [dʒəˈnetɪks] <i>n</i> – генетика | 34. supervision [ˌsuːpəˈvɪʒn] <i>n</i> –
наблюдение, руководство |
| 14. lab [læb] <i>n</i> – лаборатория | 35. Certificate [səˈtɪfɪkət] of experience –
сертификат практикующего врача |
| 15. Latin [ˈlætɪn] <i>n</i> – латынь | 36. medical practitioner [prækˈtɪʃ(ə)nəl] –
практикующий врач |
| 16. prescription [prɪˈskrɪpʃən] <i>n</i> – рецепт | 37. qualified [ˈkwɒlɪfaɪd] <i>adj</i> –
квалифицированный |
| 17. methods [ˈmeθədz] of clinical
examination [ɪgˌzæmɪˈneɪʃən] –
методы клинического обследования | 38. definite [ˈdefɪnɪt] <i>adj</i> – определенный |
| 18. history taking [ˈhɪstəriˈteɪkɪŋ] –
составление истории болезни | |
| 19. general pathology [prəˈθɒlədʒɪ] –
общая патология | |

20. microbiology [,maɪkrəʊbaɪ'ɒlədʒɪ]

n – микробиология

21. ophthalmology [,ɒfθæɪ'lɒlədʒɪ] – *n*

офтальмология

39. general practitioner (GP) – врач общей практики (*терапевт и хирург*)

40. Doctor of Medicine – доктор медицины

41. thesis ['θi:sɪs] *n* – диссертация

II. Find Russian equivalents to the following word-combinations:

1. to enter a medical school

2. undergraduate course

3. to receive [rɪ'si:v] financial [faɪ'nænʃl] assistance

4. cover ['kʌvə] the expenses

5. teaching hospitals

6. to do dissections

7. to write out a prescription

8. delivery of babies

9. bedside instruction

10. to continue the training

11. English and Latin spellings

12. to attend ward rounds

13. diagnosing a case

14. to assist in operations

15. wholly ['həʊli] or in part

16. preclinical years

17. definite field

a) получать финансовую помощь

b) покрывать расходы

c) поступить в медицинский институт

d) базовый университетский курс

e) участвовать в обходе палат

f) базовые больницы

g) инструктаж у постели больного

h) выписать рецепт

i) делать вскрытие

j) постановка диагноза

k) родоразрешение

l) ассистировать при операциях

m) полностью или частично

n) продолжить обучение

o) определенная область, сфера

p) доклинические годы

q) английская и латинская орфография

III. Restore initial forms of the following words; name each part of speech

1. medical, financial, clinical, practical, educational

2. generally, wholly, especially, highly, daily

3. gynaecologist, urologist, neurologist, cardiologist, ophthalmologist, psychiatrist, oncologist, gastroenterologist

4. registration, specialization, qualification, examination, instruction, demonstration

IV. Read and translate the text

MEDICAL EDUCATION IN GREAT BRITAIN



To enter a medical school in Great Britain candidates must send applications with the results of their secondary school examinations. Only students with the highest grades and some work experience are admitted.

In Great Britain higher medical education is not free of charge. But most students receive financial assistance in the form of grants, which cover their expenses wholly or in part.

The academic year in British medical schools is divided into 3 terms, each of 10-11 weeks' duration. Undergraduate course lasts five years, consisting of two years of basic sciences and three years of clinical work. During two preclinical years students study human anatomy and biology, physiology and biochemistry, statistics and genetics. They attend lectures and seminars, do dissections and practical work in labs. Unlike our country Latin is not taught in all medical schools. English and Latin spellings are similar and it is possible to write out prescriptions in English too.

Beginning from the third year the students study the methods of clinical examination and history taking, general pathology, microbiology, pharmacology and ophthalmology. Senior students and especially undergraduates spend most of the time in teaching hospitals. Daily bedside instruction in in-patient and out-patient departments is given by teachers and doctors. Students follow up their patients and attend ward rounds. Besides the work in the wards the students attend lectures and clinical conferences.

As for the examinations, British students take them at the end of each term and after each special course. The exams include academic and practical problems as well as diagnosing a case. The final examinations or finals are in general medicine, surgery, obstetrics and gynaecology. Before the final in surgery students assist in operations. Before the final in obstetrics and gynaecology they must assist during the delivery of at least 20 babies. After the finals graduates obtain the degrees of Bachelor of Medicine (B.M.) and Bachelor of Surgery (B.S.).

After the graduation young doctors are trained in a hospital for a year. They work under supervision of their medical school. After that they obtain a "Certificate of experience" and may work as medical practitioners. Then doctors must continue their training for 3 or more (up to 8) years to become highly qualified specialists in a definite field: general practitioners (GPs), gynaecologists, urologists, neurologists and others.

Besides the degrees of B.M. and B.S., there is the degree of Doctor of Medicine (M.D.). It's a postgraduate degree obtained by writing a thesis based on the scientific research work.

V. Guess the missing words and fill in the gaps

1. Candidates must send ... with the results of
2. Only students with ... are admitted to medical schools in Great Britain.
3. Most students receive ... in the form of
4. ... lasts 5 years.
5. Medical students study different subjects, such as
6. During their classes in anatomy students can
7. At the hospitals students ... their patients.
8. Examinations include ... problems and
9. After the finals graduates obtain
10. After ... young doctors are trained in hospitals under ... for 1 year, and then they must

VI. Make up the word combinations and translate them

to follow up	a medical practitioner
to attend	a thesis
to send	a degree
to write	qualified specialists
to obtain	final examinations
to assist in	lectures
to take	operations
to work as	the patients
to train	applications

VII. Read and translate the words, define their parts of speech

- | | |
|--------------------------------|---------------------------------|
| 1. specialize - specialization | 8. instruct - instruction |
| 2. educate - education | 9. graduate (from) - graduation |
| 3. assist - assistance | 10. dissect - dissection |
| 4. apply - application | 11. operate - operation |
| 5. examine - examination | 12. supervise - supervision |
| 6. admit - admission | 13. qualify - qualification |
| 7. enter – entrance | 14. prescribe - prescription |

VIII. Make the names of specialists from the names of the subjects:

Chemistry – a chemist.

Microbiology	Surgery	Dermatology
Physics	Gynaecology	Pediatrics
Mathematics	Obstetrics	Dentistry
Anatomy	Endocrinology	Immunology
Physiology	Neurology	Radiology
Histology	Rheumatology	Epidemiology
Pharmacology	Cardiology	Anesthesiology

IX. Compose correct sentences and translate them

- three, into, British, is, academic, the, divided, terms, medical, in, year, schools
- school, year, my, medical, a, last, friend, entered
- department, students, in, sometimes, in-patient, operations, the, at, senior, assist
- studied, and, third, in, pharmacology, year, are, the, ophthalmology
- her, highest, studies, and, grades, the, classes, gets, hard, she, at
- are, degrees, schools, B.M., B.S., and, in, British, there, medical, the, of, D.M.
- from, ago, graduated, Mary, years, the, academy, five
- pharmacy, went, the, doctor, out, and, I, to, the, wrote, a prescription

X. Look through the text and translate the following sentences

- Медицинские вузы в Великобритании принимают студентов только с высокими баллами и некоторым опытом работы.

2. Британские студенты-медики должны оплачивать свое образование.
3. Учебный год в британском медицинском вузе делится на три семестра.
4. Студенты изучают базовые предметы два года, а клинические дисциплины три года.
5. Старшекурсники проходят обучение и практику в стационарных и амбулаторных отделениях.
6. В конце каждого семестра и после каждого спецкурса студенты должны сдавать экзамены по теоретическим и практическим вопросам.
7. После окончания вуза молодой врач должен продолжить свое образование, чтобы стать высококвалифицированным специалистом.

XI. Read the statements; agree or disagree with them; give the correct version. Use the following phrases: "It's true; I quite agree with you, that ..." or "I disagree that ...; it's not true that"

1. In Britain all candidates are admitted to medical schools.
2. Higher medical education in Great Britain is not free of charge.
3. In Great Britain it is possible to write out a prescription both in English and in Latin.
4. As in Russia the academic year in British medical schools is divided into 2 terms.
5. Students spend their first year in teaching hospitals.
6. The final examinations are taken in general medicine, surgery, obstetrics and gynaecology.
7. A doctor with "Certificate of Experience" may work as a medical practitioner.
8. It takes a young doctor one year to become highly qualified specialist in a definite field of medicine.

XII. Change the sentences giving information about Russia

1. In Great Britain for entrance to a medical institution candidates must send applications with the results of their secondary school examinations.
2. Higher medical education is not free of charge in Great Britain.
3. In British medical institutions the academic year is divided into 3 terms, each of 10-11 weeks' duration.
4. In Great Britain Latin is not taught in medical schools.
5. Examinations in British medical schools are held at the end of each term, that is, three times a year.
6. After the finals graduates get the degrees of Bachelor of Medicine and Bachelor of Surgery.
7. It may take 10 or more years to become a specialist or a general practitioner in Great Britain.
8. A postgraduate qualification obtained by writing a thesis based on original work is called the degree of Doctor of Medicine.

XIII. Restore the dialogue

Imagine that you are a medical student from Oxford University. You are talking to a student from Ivanovo State Medical Academy. His name is Dima. He would like to ask you some questions about higher medical education in Great Britain. Answer his questions in the form of a dialogue. Please, give full (detailed) answers.

1. *Dima:* Hello! I am a student of a medical academy from Russia. It's interesting for me to learn how British students study in medical schools in your country. First of all, I'd like to know if it's difficult to enter a British medical school.

1. *Answer:*

2. *Dima:* In general medical education is free of charge in my country, only some students have to pay for their education. And what about your country?

2. *Answer:*

3. *Dima:* What subjects do you study in the first two years?

3. *Answer:*

4. *Dima:* What about the clinical subjects?

4. *Answer:*

5. *Dima:* Where do the students have medical practice?

5. *Answer:*

6. *Dima:* Do you take examinations every year?

6. *Answer:*

7. *Dima:* What do the graduates obtain after their final examinations?

7. *Answer:*

8. *Dima:* When will you begin your specialization?

8. *Answer:*

9. *Dima:* I've heard that there is the degree of Doctor of Medicine. Do you know how to obtain his degree?

9. *Answer:*

10. *Dima:* Thank you very much for your answers. It was very interesting.

10. *Answer:* My pleasure.

Control questions:

1. How can a candidate enter a medical school in Great Britain?
2. What is the cost of medical education in Great Britain?
3. How long does the medical education last in Great Britain?
4. What is the training during the pre-clinical years at the British medical schools?
5. What do the students do during the clinical years?
6. What can you say about exams and finals at the British medical schools?
7. What degrees do the medical students obtain in Great Britain?
8. How can they continue their education after the graduation?

Lesson 3. MEDICINE IS MY FUTURE PROFESSION

I. Read and learn the following words

1. patient [ˈpeɪʃnt] *n* – пациент, больной
2. to do harm [hɑ:m] – причинять вред
3. medicine [ˈmeds(ə)n, ˈmedɪsən] *n* –
1. медицина; 2. терапия; 3. лекарство
4. ancient [ˈeɪnʃ(ə)nt] *adj* – древний
5. to treat [tri:t] *v* – лечить
6. treatment [ˈtri:tmənt] *n* – лечение
7. development [dɪˈveləpmənt] *n* –
развитие
8. to associate with [əˈsəʊʃieɪt wɪð] *v* –
связывать с чем-либо
9. poison [ˈpɔɪz(ə)n] *n* – яд
10. to mean [ˈmi:n] *v* – означать
11. healing [ˈhi:lɪŋ] *n* – исцеление,
излечивание, лечение
12. aim [eɪm] *n* – цель
13. essence [ˈesəns] – сущность
14. to burn [bɜ:n] *v* – гореть
15. candle [kændl] *n* – свеча
16. faithful [ˈfeɪθf(ə)l] *adj* – верный
17. achieve [əˈtʃi:v] *v* – достигать
18. hard [hɑ:m] *adv* – усердно, упорно
19. knowledge [ˈnɒlɪdʒ] *n* – знание
20. necessary [ˈnesɪsəri] *adj* –
необходимый
21. enough [ɪˈnʌf] *adv* – достаточно
22. honest [ˈɒnəst] *adj* – честный
23. unselfish [ʌnˈselfɪʃ] *adj* –
бескорыстный
24. responsible [rɪsˈpɒnsəbl] *adj* –
ответственный
25. attentive [əˈtentɪv] *adj* – внимательный
26. feature [ˈfi:tʃə] *n* – характерная
черта, особенность
27. to require [rɪˈkwaɪə] *v* – требовать
28. responsibility [rɪsˌpɒnsəˈbɪlɪti] *n* –
ответственность, обязанность
29. to examine [ɪgˈzæmɪn] *v* –
осматривать, обследовать
30. disease [dɪˈzi:z] *n* – болезнь
31. to prescribe [prɪˈskraɪb] *v* –
выписывать, назначать
32. sick [sɪk] *adj* – больной
33. to win confidence [ˈkɒnfɪd(ə)ns] –
завоевать доверие
34. to cure [kjʊə] *v* – вылечивать,
излечивать (от болезни)
35. case [keɪs] *n* – случай
36. pain [peɪn] *n* – боль
37. hope [həʊp] *n* – надежда
38. to impart [ɪmˈpɑ:t] *v* – передавать
39. faith [feɪθ] *n* – вера
40. willpower [ˈwɪlˌpaʊə] *n* – сила воли
41. to be able [eɪbl] to *v* – быть
способным
42. to cope with difficulties [kəʊp wɪð
ˈdɪfɪkəltɪz] – справляться с трудностями
43. to devote to [dɪˈvəʊt tu:] *v* –
посвящать (чему-либо)
44. protection [prəˈtekʃən] *n* – защита
45. health [helθ] *n* – здоровье
46. sacred [ˈseɪkrɪd] *adj* – священный

II. Read and remember proper names

Hippocrates [hɪˈpɒkrəti:z], Galen [ˈgɑ:lən], Avicenna [ˌævɪˈsenə],
Amsterdam [ˌæmstəˈdæm], Nicolaes Tulp [ˈnikələəs tʌlp]

III. Read and translate the text

MEDICINE IS MY FUTURE PROFESSION

"I shall enter any house for the good of the patient, I shall not do my patient any harm."

Hippocrates

There are many professions and trades on earth, but profession of a doctor is the most ancient among them. People tried to treat each other many centuries ago. The development of medicine is associated with the names of Hippocrates, Galen, Avicenna.

Everybody knows that the symbol of medicine is the snake giving its poison into the cup. It means wisdom and healing - the aims of medicine. Another symbol is a burning candle which reflects the inner essence of this profession. It was left by a famous doctor from Amsterdam Nicolaes Tulp. "Aliis inserviando consumer" – "Giving light to others I burn myself". A great number of doctors were faithful to this symbol to the last.

To achieve this aim, medical students must study well and hard at the Academy. Deep knowledge in medicine will be necessary to them in their future work. But professional knowledge is not enough to become a good doctor. To be a good doctor means to be honest, unselfish, responsible, and attentive to other people. Love for men and optimism are the most important features for a doctor.

Medical students should remember that a great profession requires great responsibilities. A doctor has to examine his patients attentively and diagnose diseases correctly. He must prescribe right medicines and other kinds of treatment. Also, he has to know how to talk to sick people, and he must do his best to win the confidence of a patient. Sometimes it is difficult to cure a disease. In many cases the doctors face pain, hope and mute question "Shall I live?" A true doctor can look into the eyes of another in such a way as to impart to him his faith, willpower and hope.

To be a doctor is not easy. But if you are strong enough, you'll be able to cope with all the difficulties and to devote your life to the protection of people's health. Over 2000 years ago the Hippocratic Oath set the physicians to their path, and it was sacred to each of them.

IV. Guess the missing words and fill in the gaps

1. The development of medicine ... with the names of People tried
2. "... I burn myself". A great number of doctors ... to the last.
3. Professional ... is not
4. ... should remember that ... profession
5. In many cases the doctors face
6. If you are ..., you'll be able to ... and to ... your life to
7. Over ... the Hippocratic Oath ..., and it ... to each of them.

V. Fill in the right pre- and post- positions

(at, with, of, in, into, to)

1. to be associated ...
2. to be faithful ... this symbol ... last
3. to study well ... the Academy
4. to cope ... difficulties
5. to impart ... somebody
6. to talk ...

somebody 7. to look ... the eyes ... somebody 8. the protection ... one's health 9. to devote one's life ... something 10. the aims ... medicine 11. to give poison ... the cup 12. ... such a way 13. to set someone ... one's path

VI. Make up the word combinations and translate them

a) important	candle	b) to win	medicines
Hippocratic	profession	to cure	essence
great	knowledge	to face	responsibilities
sick	question	to prescribe	light
inner	doctor	to achieve	patients
burning	Oath	to reflect	disease
deep	people	to give	confidence
mute	features	to examine	pain
true	essence	to require	the aim

VII. Translate the sentences into English

1. Чаша со змеей – это символ мудрости, знаний и исцеления.
2. Символ горящей свечи отражает внутреннюю сущность медицинской профессии.
3. Глубокие профессиональные знания в медицине необходимы для будущего врача.
4. Чтобы стать хорошим врачом, студенты-медики должны прилежно учиться.
5. Студенты-медики учатся диагностировать и лечить заболевания.
6. Доктор должен быть честным, бескорыстным, ответственным и внимательным к своим пациентам.
7. Одна из основных задач внимательного и ответственного доктора – завоевать доверие пациентов.
8. Доктора делают всё возможное, чтобы передать пациентам свою веру, надежду и силу воли.
9. Чтобы назначить лечение и лекарства, врач должен осмотреть пациента.

VIII. Read and translate stories about the profession of a doctor; answer the questions:

Why do you think these people decide to become doctors?

Why have you chosen such a profession?

A. I dreamed of medicine from my early childhood. Being a little girl I used to play treating my dolls examining them carefully. I used to sit beside my father and listen to him telling about his patients and his work at the hospital. So I made up my mind once and for all: I am going to be a doctor.

B. I am sure that a medical profession is one of the humane and sacred professions. Health remains the supreme goal at all times. It is given to us but once.

We can either keep it or lose it. I understand all the responsibility of a doctor and I am ready to devote my life to the protection of people's health.

C. Medicine today consists of many branches, such as oncology, surgery, ophthalmology, psychotherapy, etc. What branch of medical science to choose? As for me there is no problem – I want to become a cardiologist. The fact was that I had a granny whom I loved very much. For many years she suffered from a serious heart disease and no treatment could help her to recover. I felt very sorry for her. So I decided to learn the ways of helping people to have a healthy heart.

Words:

- | | |
|---|--|
| 1. carefully [ˈkeəf(ə)li] – внимательно | 10. branch [ˈbrɑ:nʃ] – направление |
| 2. to make up one's mind – решить(ся) | 11. psychotherapy [ˌsaɪkəˈθerəpi] – психотерапия |
| 3. to be sure [ʃvə] – быть уверенным | 12. to suffer [ˈsʌfə] from – страдать от |
| 4. humane [hjuˈmeɪn] – гуманный | 13. serious [ˈsi(ə)rɪəs] – тяжелый |
| 5. to remain [riˈmeɪn] – оставаться | 14. heart [hɑ:t] – сердце |
| 6. supreme [suˈpri:m] – наивысший | 15. to recover [riˈkʌvə] – выздоравливать |
| 7. goal [gəʊl] – цель | |
| 8. either [ˈaɪðə] ... or – или... или | |
| 9. to lose [lu:z] – терять | |

IX. Read and share your opinion on statements about medical profession.

Correct them if they are not right or agree if you think the same

1. Profession of a doctor is a modern one.
2. The aims of medicine are examining patients and prescribing treatment.
3. Most of the medical students do not understand all the difficulty of their future profession.
4. Deep knowledge of medicine is enough to become a good doctor.
5. The most important features for a doctor are punctuality and courage.
6. A good doctor must love people and have a kind heart.
7. A doctor must be a good professional.
8. A good doctor never makes diagnostic mistakes.
9. It is not difficult to gain patient's confidence.
10. The responsibilities of the doctor are to speak about diseases and discuss them with his colleagues [ˈkɒli:gz] and patients.
11. It is easy to cure a disease because in many cases the doctors face simple tasks.

X. Do the following tasks

Task № 1.

Prove that Konchalovsky's words are true: "A person may be a poor writer, he may be a bad painter or actor, but a man cannot and must not be a bad doctor".

Key words and expressions: a kind heart, honest, strong, to be responsible for..., human life (lives), deep knowledge, professionalism, to give something to other people, the supreme goal, to devote one's life to, a noble profession.

Task № 2.

Prove that to treat people is a great art.

Key words and expressions: deontology, relations between a doctor and his patients, the ability to listen to a patient, to be responsible for, health, skills, difficulties, valuable remedy, a kind word, to be very attentive to... .

Task № 3.

Prove that the role of medicine in our life has greatly increased.

Key words and expressions: to look after one's health, to undergo regular medical examinations, modern technologies, new methods of treatment, available.

Task № 4.

Medical wisdom of ancient Iran says: "A doctor has three instruments: a word, a plant and a knife". How do you understand it? Why is "a word" in the first place?

Key expressions: to gain patient's confidence, a kind heart, to be very attentive, not to do any harm, a proper medicine, the last chance, a fatal illness, to perform an operation, to save a human life.

XI. Answer the questions using the following phrases

In my opinion, ..., I suppose that..., From my point of view ..., As for me, ..., Personally, I think that..., As far as I am concerned..., It seems to me that... .

1. Why have you chosen the profession of a doctor?
2. Have you chosen your future specialization yet?
3. What features must you have to be a good doctor?
4. What doctor may be called an ideal one?
5. Have you got an ideal of a doctor? Can you describe him?
6. What is most important in the profession of a doctor?
7. What is unacceptable in the doctor's work?
8. Are there any advantages and disadvantages in the profession of a doctor?

XII. Find information and comment on the following symbols of medicine



Control questions

1. What famous ancient doctors do you know?
2. What are the symbols of medicine?

3. What must you do to become good doctors in the future?
4. What qualities are necessary for every doctor?
5. Do you think your future profession is difficult? Why is it difficult?
6. What are the main responsibilities of a doctor?
7. What thing is the most necessary in relations between a doctor and a patient?
8. Why did you decide to become a doctor?

Lesson 4. POLYCLINICS

I. Learn the pronunciation of the following words and translate them:

Polyclinic [ˈpɒlɪ,klɪnɪk], care [keə], local [ˈləʊk(ə)l], seriously [ˈsɪ(ə)rɪəslɪ], regimen [ˈredʒɪmən], administered [əd,mɪnɪstəd], injection [ɪnˈdʒekʃ(ə)n], temperature [ˈtemprətʃə], blood pressure [ˈblʌd,presʃə], findings [ˈfaɪndɪŋz], analysis [əˈnæləsis], urine [ˈjʊ(ə)rɪn].

II. Read and translate the text

POLYCLINICS

The polyclinic is the basic medical institution of the health care system in Russia that aims to protect the health of our citizens. There are polyclinics for the adult population and polyclinics for children. Many specialists including general practitioners, neurologists, surgeons and others work at the polyclinic.

A local physician knows his patients very well because he treats only a definite number of patients. He works 6 hours a day. Part of his working day he is on call. Local physicians go out to the calls after consulting hours to examine those patients who are seriously ill. Such sick persons receive a sick-leave. They usually follow a bed regimen. If it is necessary a nurse will come to the patient's house to give him administered injections or carry out any of the doctor's administrations.

If a person falls ill but his condition isn't very poor and he has no temperature he will go to the local polyclinic and a physician will examine him there. During the medical examination a physician usually asks his patient what he complains of and according to the complaints carries on the medical examination. A physician examines the patient's lungs, checks his blood pressure and if it is necessary takes the patient's temperature.

At the local polyclinic every patient has his personal patient's card which is filled in by his physician. The diagnosis of the disease, the administrations made by the doctor, the course of the disease, the changes in the patient's condition after the treatment are written down in the card.

When a patient visits the doctor for the first time the doctor will ask questions about the patient's previous illnesses, about childhood diseases the patient had. Very often the doctor is able to make a diagnosis right away and prescribe some medicines and the necessary treatment.

X-ray examinations, the laboratory findings which include blood analysis, the analysis of urine (urinalysis) and other tests help a physician to make a correct diagnosis and administer a proper treatment.

If the patient is seriously ill or if he needs an operation the doctor will admit the patient to the hospital.

III. Translate the words into English and learn them

- | | |
|--|-------------------------------------|
| 1. система здравоохранения | 16.жаловаться на что-либо |
| 2. участковая поликлиника | 17.жалоба |
| 3. участковый врач | 18.обследовать сердце, легкие |
| 4. лечение | 19.измерять давление |
| 5. ходить по вызовам | 20.измерять температуру |
| 6. часы приема | 21.заполнять карточку пациента |
| 7. вызывать врача на дом | 22.делать назначения |
| 8. получать больничный лист | 23.записывать назначения |
| 9. соблюдать лечение, диету,
постельный режим | 24.течение болезни |
| 10.назначить лечение, диету,
постельный режим | 25.изменения в состоянии пациента |
| 11.делать инъекции | 26.ставить диагноз |
| 12.выполнять, проводить | 27.анализ, анализы |
| 13.заболеть | 28.анализ крови |
| 14.детские болезни | 29.анализ мочи |
| 15.медицинское обследование | 30.результаты лабораторных анализов |
| | 31.выписывать лекарство |
| | 32.принимать лекарство |

IV. Complete the sentences with correct prepositions/ postpositions:

1. The doctor isn't at the polyclinic now, he's ... call.
2. The patient complained ... tachycardia.
3. The nurse carried ... all the necessary procedures.
4. The boy is afraid. He is coming to the dentist ... the first time.
5. ... consulting hours a doctor may go ... the calls.
6. She took my temperature and filled ... the temperature chart.
7. They had to carry ... the work which he had begun.

V. Correct the following statements:

1. Local physicians treat patients from all parts of our country.
2. Physicians spend their working days in the patients' houses.
3. A nurse often comes to the patient's house to take his or her temperature.
4. If a person falls ill and is in a very bad condition he will go to the local polyclinic.
5. During the medical examination a physician usually complains of something.
6. At the local polyclinic every patient has cards to play with a physician.
7. Doctors can't make a diagnosis when they come to the patient for the first time.
8. Laboratory findings and examinations are necessary only when the patient needs

an operation.

VI. Define the part of speech of the following words and translate them. Use them in the sentences below

Complain, complaint; inject, injection; call, to call; consult, consulting, consultation; ill, illness; sick; sickness; examine, examination; diagnose, diagnosis; treat, treatment; administer, administration; prescribe, prescription.

1. You're late. The doctor's ... hours are over. He is on
2. What is your ...? – I have a bad headache.
3. Physical ... includes palpation, percussion and auscultation.
4. The physician wrote out a ... and asked father to go to the pharmacy.
5. I know you can ... many diseases, I come for your ... and advice.
6. The ... man had to ... to the polyclinic for the doctor to come.
7. His grandmother likes to ... of everything.
8. I don't think you have bronchitis, you should ... your physician about your
9. I must give you an ... because it is the doctor's
10. Why is John absent? He has fallen
11. The case was difficult to
12. This drug will be more effective if you ... it directly into the bloodstream.
13. The doctor made the ... of pneumonia and told to ... him a special diet and home treatment.
14. She never travels by sea as she has a sea
15. Let me ... your heart and lungs.
16. The ... at this health centre is excellent.

VII. Say what people do if

- | | |
|---------------------------|----------------------------------|
| 1. they have a headache | 4. they have a pain in the heart |
| 2. they can't sleep | 5. they have a cold |
| 3. they have a toothache; | 6. they have a stomachache |

Use the word-combinations: to go to the dentist, to call a doctor, to go to bed, to take some medicine, to have a walk outdoors, to drink warm milk, to drink warm milk with honey and butter.

VIII. Read and translate the conversation that takes place at the doctor's

Doctor: Good evening. What's the trouble?

Patient: I haven't been feeling well for some time. I have lost my appetite and I don't sleep very well. I have rather a bad cough that I can't get rid of (избавиться), and a pain in my chest sometimes when I breathe.

D.: I see, very well. You need a thorough ['θArə] examination. Let me see your tongue... Yes, your stomach is a little out of order ... Now your pulse ... Yes, that's all right. Now just unfasten your shirt and I'll listen to your heart and chest... Do you smoke a lot?

P.: Well, rather a lot, I'm afraid; twenty or thirty cigarettes a day.

D.: Hm! You ought to cut that down for a time. Let me see your throat. Open your mouth Say "Ah!"

P.: Ah! Ah!

D.: All right, that will do. Have you been losing weight?

P.: No, I don't lose or gain, at least never more than half a kilo or so one way or the other.

D.: Well, there's nothing serious the matter with you, but you are rather run down (переутомлены). You've been working too hard. You need a real rest. I'll give you a bottle of medicine that will help. Take a table-spoonful in water three times a day after meals. Eat plenty of good plain food, have no cigarettes and drink plenty of milk, and not too much coffee, get plenty of fresh air and plenty of sleep, but, above all, don't try to do too much. A real change of air and surroundings would be very helpful.

P.: As a matter of fact, a friend of mine has invited me to come and stay with his family in their cottage near the sea.

D.: That's just the thing. But remember, take it easy. Not too much swimming or tennis, at least for a week or two, but a good walk by the sea every day will do you a world of good. Another month and you'll be as fit as a fiddle. Good-bye.

IX. Complete the following dialogues

1. Doctor.: Good morning, Mr. Thompson. What's the trouble?

M.T.: ...

D.: Any pain?

M.T.: ...

D.: How long have you been like that?

M.T.: ...

D.: Please, strip to the waist and I'll examine you.

M.T.: ...

D.: I'm afraid it's pneumonia and you must have penicillin injections. Go straight home and I'll send you a nurse immediately.

M.T.: ...

D.: Certainly, for at least a week or ten days. There's a prescription. Take a spoonful of this medicine there three times a day.

M.T.: ...

D.: Oh, don't mention it, please. Make sure to follow my instructions. Good-bye.

2. Doctor: ...

Cris: Good morning, Doctor.

D.: ...

C.: I feel hot and feverish, Doc. I've got a terrible sore throat.

D.: ...

C.: It's probably only the flue, but I thought I'd better see you.

D.: ...
 C.: No, I haven't yet. I don't have a thermometer. I came here after work.
 D.: ...
 C.: My throat has been sore and painful, Doctor.
 D.: ...
 C.: Aaaaahh!
 D.: ...
 C.: What am I to do, Doctor?
 D.: ...
 C.: Thank you, Doc. Good-bye.

X. Compose your own dialogues

a) Describe your condition to the doctor who came to examine you.

USE: feel unwell (feverish, hot, cold, shivery), could hardly sleep the night before, could hardly eat (work), have a bad (splitting) headache (sore throat), have a bad cough (pain in the chest, heart-ache, etc.), suffer from high (low) blood pressure, have a heart (liver, kidney) problem, complain of a bad cough, bad pain in the..., running a high temperature, sneeze, to prescribe some medicine.

b) Your friend looks (feels) unwell. Talk him into consulting a doctor.

USE: what's wrong (what's the matter) with you? You don't look well (healthy), you ought to consult a doctor about your heart (liver, blood pressure, etc.), there must be something wrong with your heart (liver, lungs, eyes, etc.), you'd better consult a doctor, why not consult a doctor, take your temperature, you should have your chest X-rayed (cardiogram taken, throat examined, blood pressure measured, eyes tested, teeth checked up).

c) Describe your gradual recovery and thank your friend who has come to inquire about your condition.

USE: to recover, recovery, feel much better, drink and sleep a lot, eat with better appetite, the temperature dropped, feel again like working (going out, reading), hate doing nothing (lying down, staying in bed), I'm very thankful to you.

Control questions

1. What is a polyclinic? What specialists work there?
2. How does a local physician work?
3. What treatment does a patient with a sick-leave get?
4. What does a medical examination include?
5. What does a doctor ask his patient during an examination?
6. What is written down in the patient's card?
7. What helps a physician to make a correct diagnosis and administer a proper treatment?

UNIT II. STUDYING A MEDICAL TEXT IN ENGLISH

Lesson 5. THE HUMAN ANATOMY

I. Read and learn the words and the word-combinations

1. human body ['hju:mən 'bɒdɪ] – человеческое тело
2. principal ['prɪnsəpəl] *adj* - основной
3. trunk [trʌŋk] *n* – туловище
4. limb [lɪm] / extremity [ɪk'stremɪtɪ] *n* – конечность
5. to consist of [kən'sɪst] *v* – состоять из
6. skull [skʌl] *n* – череп
7. face [feɪs] *n* – лицо
8. bone [bəʊn] *n* – кость
9. forehead ['fɒrɪd] *n* – лоб
10. eye [aɪ] *n* – глаз
11. mouth [maʊθ] *n* – рот
12. lip *n* – губа
13. cheek [tʃi:k] *n* – щека
14. ear [ɪə] *n* – ухо
15. chin [tʃɪn] *n* – подбородок
16. to include [ɪn'klu:d] *v* – включать
17. main [meɪn] *adj* – главный, основной
18. external [ɪk'stɜ:nl] *adj* – наружный
19. middle [mɪdl] *adj* – средний
20. internal [ɪn'tɜ:nl] *adj* – внутренний
21. lower ['ləʊə] *adj* – нижний
22. upper ['ʌpə] *adj* – верхний
23. tooth ['tu:θ] *n* – зуб; *pl* teeth ['ti:θ]
24. tongue [tʌŋ] *n* – язык
25. soft and hard palates [sɒft ənd hɑ:d 'pælɪts] – мягкое и твердое нёбо
26. salivary glands ['sælɪvəri glændz] – слюнные железы
27. to connect [kə'nekt] *v* – соединять
28. neck [nek] *n* – шея
29. spinal column ['spainl'kɒləm] – позвоночный столб
30. chest [tʃest] / thorax ['θɔ:ræks] *n* – грудная клетка
31. соссух ['kɒksɪks] *n* – копчик
32. abdominal cavity [æb'dəʊmɪnəl 'kævɪtɪ] – брюшная полость
33. to be composed of [kəm'pəʊzɪd] *v* – состоять из
34. breastbone ['brestbəʊn] *n* – грудина
35. to form ['fɔ:m] *v* – формировать
36. basic ['beɪsɪk] *adj* - основной
37. pair [peə] *n* – пара
38. rib [rɪb] *n* – ребро
39. cartilage ['kɑ:t(ə)lɪdʒ] *n* – хрящ
40. lung [lʌŋ] *n* – легкое
41. heart [hɑ:t] *n* – сердце
42. esophagus [i:'sɒfəgəs] *n* – пищевод
43. to contain [kən'teɪn] *v* – содержать в себе, вмещать
44. stomach ['stʌmək] *n* – желудок
45. pancreas ['pæŋkrɪəs] *n* – поджелудочная железа
46. liver ['lɪvə] *n* – печень
47. spleen [spli:n] *n* – селезенка
48. intestine [ɪn'testɪn] *n* – кишечник
49. kidney ['kɪdnɪ] *n* – почка
50. gallbladder ['gɔ:lblædə] *n* – желчный пузырь
51. bladder ['blædə] *n* – мочевой пузырь
52. shoulder ['ʃəʊldə] *n* – плечевой сустав
53. upper arm ['ʌpə 'ɑ:m] – плечо
54. forearm ['fɔ:rɑ:m] *n* – предплечье
55. hand [hænd] *n* – кисть (руки)
56. thigh [θaɪ] *n* – бедро
57. leg [leg] *n* – нога, голень
58. foot [fu:t] *n* – стопа
59. pelvis ['pelvɪs] *n* – таз
60. to cover ['kʌvə] *v* – покрывать
61. skin *n* – кожа

II. Read, translate and learn the following words

anatomy [ə' nætəmi]
practical ['præktɪkəl]
structure ['strʌktʃə]
cervical ['sɜ:vɪk(ə)l]
thoracic [θɔ:'ræsɪk]

lumbar ['lʌmbə]
sacral ['seɪkrəl]
vertebra ['vɜ:tɪbrə]
vertebrae ['vɜ:tɪbrɪ:]
organ ['ɔ:gən]

III. Read and translate the text

WE STUDY THE HUMAN ANATOMY

In the practical anatomy classes we study the human body.

The principal parts of the human body are the head, the trunk and the limbs (extremities).

The head consists of two parts: the skull and the face. There are 23 bones in the skull. The face consists of the forehead, the eyes, the nose, the mouth, the lips and the cheeks, the ears and the chin.

The ear includes three main parts: the external ear, the middle ear and the internal ear. The mouth has two lips: an upper lip and a lower lip. Important structures of the mouth are the teeth, the tongue, the soft and hard palates and the salivary glands.

The head is connected with the trunk by the neck. The bones of the trunk are the spinal column or the spine and the chest. The spine consists of the cervical, thoracic, lumbar and sacral vertebrae and the coccyx. The trunk is divided into the chest and the abdominal cavity.

The chest (thorax) is composed of 12 thoracic vertebrae, the breastbone and 12 pairs of ribs. The breastbone is a long bone in the middle of the chest. The basic part of the chest is formed by the ribs. On each side of the chest seven ribs are connected with the breastbone by cartilages. The cartilages of three other ribs are connected with each other and with the seventh rib. The 11th and the 12th ribs are free. Each rib is composed of a neck, head and body. The principal organs in the chest are the lungs, the heart and the esophagus.

The abdominal cavity contains the stomach, the pancreas, the liver, the spleen, the intestines, the kidneys, the gallbladder and the bladder.

The upper extremity is connected with the chest by the shoulder. It is formed by the upper arm, forearm and hand. The lower extremity consists of the thigh, leg and foot. It is connected with the trunk by the pelvis.

The body is covered with the skin.

IV. Find English equivalents of the following word combinations and sentences in the text

1. мы изучаем человеческое тело
2. череп и лицо
3. в черепе 23 кости
4. ухо состоит из 3 частей

5. твердое и мягкое небо находится во рту
6. позвоночник состоит из различных позвонков
7. грудина – в середине грудной клетки
8. ребра соединены с грудиной хрящами
9. 11 и 12 ребра – свободные
10. печень и селезенка – это органы брюшной полости
11. человек имеет две верхние и две нижние конечности
12. человеческое тело покрыто кожей

V. Express the following word combinations in one word

1. a long bone in the middle of the chest
2. one of the separate segments composing the spinal column
3. the upper part of the human body
4. the end of the arm
5. the part of the lower extremity between the thigh and the foot
6. the part of the leg on which one walks
7. the human body apart from the head and extremities
8. the part of the body that connects the head and the shoulder
9. a small bone at the base of the spine of humans
10. the lower cavity in a human's trunk (below the diaphragm)
11. the hard white objects in your mouth, which are used for biting and chewing

VI. Make up word combinations and translate them

a) human principal external internal upper lower salivary hard spinal cervical thoracic twelve	arm ribs limbs body column vertebrae cavity glands organs palate ear parts
b) to form to be connected by to include to consist of to contain to be composed of	many vertebrae three parts twelve pairs of ribs the chest some inner organs cartilages

VII. Put questions to the underlined words

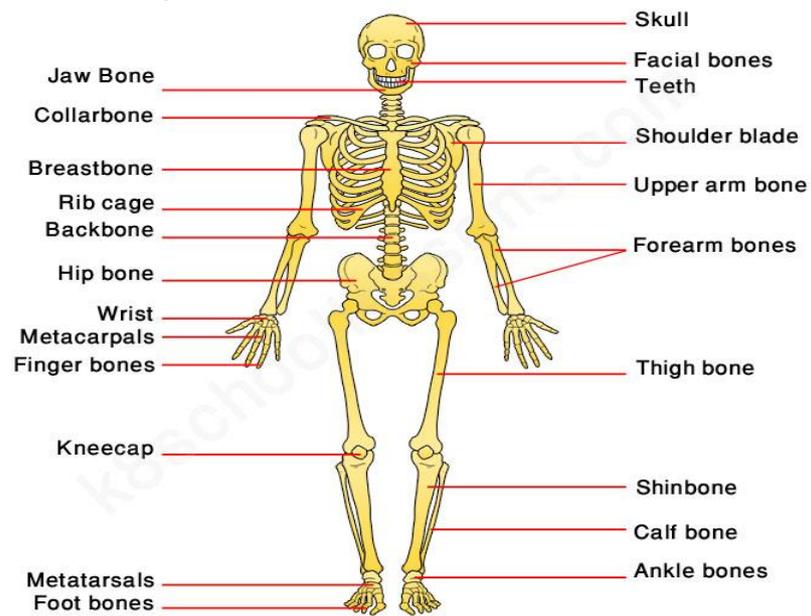
1. In the practical Anatomy class we study the human body.
2. The head consists of two parts.
3. There are 23 bones in the skull.
4. The mouth has two lips.
5. The tongue is the organ of taste.
6. The head is connected with the trunk by the neck.
7. The basic part of the chest is formed by the ribs.
8. The eleventh and the twelfth ribs are free.
9. The upper extremity is formed by the upper arm, forearm and hand.
10. The body is covered with the skin.

VIII. Compose correct sentences and translate them

1. are, with, the oral cavity, connected, the salivary glands;
2. the oral cavity, are, the soft and hard palates, located in;
3. the structure, is, by, of, the human body, anatomy, described;
4. into, the abdominal cavity, divided, the trunk, the chest, and, is;
5. are, together, firmly, the bones, of, very, connected, the skull;
6. forearm, is, and, hand, the upper extremity, by, formed, the upper arm;
7. studied, in, anatomy, the, practical, body, is, classes, the, human.

IX. Transform the sentences from Active into Passive Voice

1. Seven cervical vertebrae compose the cervical part of the spine.
2. Cranial and facial bones form the skull.
3. The pelvis connects the lower extremity with the trunk.
4. The vertebrae form the spinal column.
5. The shoulder connects the upper extremity with the trunk.
6. The skin covers the body.



X. Read and translate the text

THE SKELETON

The bones form the skeleton of the body. The most important part of the skeleton is the backbone, or vertebral column. The bones which form the skeleton or bony framework of the body are divided into the bones of the head, the bones of the trunk, the bones of the lower and upper limbs.

At the upper end of the backbone there is the skull. Inside the skull is the brain which is the most complex organ of the body. The bones of the head include the bones which make up the box-like structure we call the skull, and also that freely movable bone which forms our lower jaw.

There is another bony structure in front of the backbone. The ribs, which are joined to the backbone behind and bend round towards the breastbone in front, form a strong cage – the chest, inside of which are placed the heart and the lungs. The bones of the trunk include the spinal column, the ribs and the breastbone.

The arms join the body at the shoulder, and the shoulder itself is formed of two bones – the collar-bone in front, and the shoulder-blade behind. Between the shoulder and the elbow there is only one bone in the arm, but between the elbow and the wrist there are two. In the wrist there are eight small bones. They are very firmly bound together. Next come the bones of the hand itself. In the body or palm of the hand there are five long bones – one for each finger and one for the thumb. Each of the fingers has three bones, and the thumb has two. Thus, we have twenty-seven bones in the framework of the hand and wrist.

There are two pairs of the limbs – the upper, or arms, and the lower, or legs; and the legs and arms again are subdivided into several parts – the thigh, the leg, the foot and the toes in the lower limb and the upper arm, the forearm, the wrist and the fingers in the upper limb.

The trunk is divided into the chest or thorax, and the abdomen. The abdominal cavity contains two kidneys, connected by a tube, the ureter, to a muscular bag, the bladder; the liver, the pancreas and the spleen.

Cavity of the skull opens into the spinal canal. It contains the brain, which is continuous with the spinal cord. The brain and the spinal cord together constitute the cerebrospinal system. And cavity of the face is occupied by mouth and pharynx, into which the upper end of the digestive tract (called esophagus) opens.

XI. Read and learn the words

- | | |
|--|--|
| 1. backbone [ˈbækbəʊn] <i>n</i> –
позвоночник | 6. freely [ˈfri:li] <i>adv</i> – свободно |
| 2. vertebral column [ˈvɜ:tɪbrəlˈkɒləm] <i>n</i>
– позвоночный столб, спинной хребет | 7. movable [ˈmu:vəbl] <i>adj</i> – подвижный |
| 3. bony framework [ˈbəʊniˈfreɪmwɜ:k] <i>n</i>
– костный остов, каркас | 8. jaw [dʒɔ:] <i>n</i> – челюсть |
| 4. brain [breɪn] <i>n</i> – мозг | 9. to join [dʒɔɪn] <i>v</i> – соединять(ся),
присоединять(ся) |
| 5. complex [ˈkɒmpləks] <i>adj</i> – сложный | 10. to bend (bent, bent) <i>v</i> – сгибаться |
| | 11. arm [ɑ:m] <i>n</i> – рука |
| | 12. collar-bone [ˈkɒləbəʊn] <i>n</i> – ключица |

- | | |
|--|---|
| 13. shoulder-blade [ˈʃəʊldəˈbleɪd] <i>n</i> – лопатка | 24. muscular bag [ˈmʌskjʊləˈbæɡ] – мышечная сумка |
| 14. elbow [ˈelbəʊ] <i>n</i> – локоть, локтевой сустав | 25. spinal canal [ˈspaɪnl kəˈnæɪl] <i>n</i> – позвоночный канал |
| 15. wrist [rɪst] <i>n</i> – запястье, запястный сустав | 26. spinal cord [ˈspaɪnlˈkɔ:d] <i>n</i> – спинной мозг |
| 16. firmly [ˈfɜ:mli] <i>adv</i> – плотно, крепко | 27. to constitute [ˈkɒnstɪtju:t] <i>v</i> – составлять, представлять |
| 17. to bind [baɪnd] (bound, bound [baʊnd]) <i>v</i> – связывать | 28. cerebrospinal system [ˈserɪbrəˈspaɪn(ə)lˈsɪstəm] – спинномозговая система |
| 18. palm [pɑ:m] <i>n</i> – ладонь | 29. to occupy [ˈɒkjupaɪ] <i>v</i> – занимать |
| 19. finger [ˈfɪŋɡə] <i>n</i> – палец руки | 30. pharynx [ˈfærɪŋks] <i>n</i> – глотка |
| 20. thumb [θʌm] <i>n</i> – большой палец (руки) | 31. digestive tract [daɪˈdʒesɪvˈtrækt] – пищеварительный тракт |
| 21. toe [təʊ] <i>n</i> – палец на ноге | |
| 22. abdomen [ˈæbdəmen], [æbˈdʌmən] <i>n</i> – брюшная полость, живот | |
| 23. ureter [ju(ə)ˈri:tə] <i>n</i> – мочеточник | |

XII. Find in the text the following word combinations

Образовывать (составлять) скелет; наиболее важная часть скелета; костный остов; кости головы; кости туловища; кости нижних и верхних конечностей; самый сложный орган человека; включают кости; свободно двигающаяся кость; нижняя челюсть; присоединяются к позвоночнику; внутри которой размещены сердце и легкие; включают позвоночник, ребра и грудину; в плече; ключица и лопатка; между плечом и локтем; между локтем и запястьем; крепко связаны вместе; для каждого пальца; большой палец руки, руки и ноги, стопа и пальцы, брюшная полость, вместе составляют спинномозговую систему.

XIII. Guess the missing words and fill in the gaps

- At the upper end of the backbone there is
- The bones which form the skeleton are divided into the bones of the head, the bones of ... , the bones of ... and
- The most important part of the skeleton is
- ... form the skeleton of the body.
- The bones of the trunk include ..., ... and
- The ribs form a strong cage - ..., inside of which are placed ... and
- The arms ... the body at the shoulder.
- Between the shoulder and ... there is only one bone in the arm.
- In ... there are eight small bones.
- In the palm of the hand there are ... – one for each ... and one for
- ... has three bones, and ... has two.

12. The trunk is divided into ... and
13. ... contains two kidneys, the ureter, the bladder, the liver, ... and
14. ... and ... together constitute the cerebrospinal system.

XIV. Make up the word combinations and translate them

a) to form to join to be divided into to make up to include	the chest and the abdomen the spinal column, the ribs, the breastbone the skeleton the body the box-like structure
b) upper lower important spinal bony movable	bone column jaw limbs framework organ

XV. Translate into English

1. Плечо состоит из двух костей: ключицы спереди и лопатки сзади.
2. Кости туловища включают позвоночник, ребра и грудину.
3. Позвоночник является наиболее важной частью скелета.
4. Кости, которые составляют скелет, делятся на кости туловища, головы и кости нижних и верхних конечностей.
5. Внутри грудной клетки расположены сердце и легкие.
6. Между плечом и локтем есть только одна кость в руке, но между локтем запястьем – их две.
7. У каждого пальца есть 3 кости, а у большого пальца руки их – две.
8. Кости запястья крепко соединены вместе.
9. Бедро, голень, стопа и пальцы – части нижней конечности.
10. Почки, мочеточник, печень, поджелудочная железа, селезенка, мочевой пузырь находятся в брюшной полости.

XVI. Say what you know about

- | | |
|---------------------------|----------------------------------|
| a. the backbone | f. the wrist and the hand |
| b. the skull | g. the upper and the lower limbs |
| c. the bones of the trunk | h. the abdominal cavity |
| d. the bones of the arms | i. the cerebrospinal system |
| e. the ribs | |

XVII. Complete the sentences using the following words and translate them

kidneys, eyes, bones, tongue, heart, lungs, ears, liver, nose, blood, muscles, vertebrae, stomach

1. A backbone consists of 33 ... which are numbered and divided into regions.
2. In the ... the food is stored and digested by the gastric juice.
3. The human ... normally beats about 70 times a minute making the ... move along arteries, veins and capillaries.
4. ... produce all kinds of movements in our body, from smiling and eye blinking to running and weight lifting.
5. ... protect and support the organs of the body.
6. ... are the main organs of breathing.
7. The function of the ... is to metabolize chemicals.
8. ... serve as filters which separate the urine from the blood.
9. Man has several organs of sense: the organs of sight are the ..., the organs of hearing are the ..., and the organ of smell is the
10. The ... is a muscular organ in the mouth used in eating, tasting, and speaking.

XVIII. Complete the sentences using the words given below

1. Four ... see more than two (a proverb).
2. A good surgeon must have an eagle's ..., and lady's
3. You are so thin! You look almost like a ... !
4. "The Jolly Roger" is the emblem on pirates' flag, it pictures
5. It's raining heavily! I am wet
6. They told him to hold his ... and to keep their secret.
7. This carpet is very expensive, it is ...-made.
8. He is a brilliant scientist, in fact, he is the ... of our research group.
9. He will forgive you, I am sure. I know him as a man with a kind
10. Parks and forests around Moscow are the "green ..." of the city.

eye; heart; hand; skeleton; brain; from head to foot; tongue; eyes; skull and cross-bones; lungs

XIX. Read and translate the additional text

YOU ARE WONDERFUL

Do you know how wonderful you are? Here are some surprising facts about you.

The human brain is about 75% water and is very soft and fatty like butter. It has no pain receptors so your brain can feel no pain. The human brain has a memory capacity which is the equivalent of more than four terabytes on a hard drive.

The liver is the largest internal organ. It is responsible for performing over 500 different unique vital functions of our body.

The left lung is smaller than the right lung to make room for the heart.

The jaw muscle is the strongest in the human body.

The human eye can distinguish about 10 million different colours.

Everyone has a unique smell, unique fingerprint, and unique tongue print.

Your salivary glands produce two to six cups of (0,5-1,5 litres) of saliva a day.

When you do not sleep, you spend about five minutes of each hour with your

eyes shut. That is because you blink your eyes about 25 times a minute and each blink takes one-fifth of a second.

Speaking of hair, a dark-haired person has on his head about 120,000 hairs; a blond about 150,000 hairs; and a red-haired person only about 90,000.

You need to use 200 muscles to take a single step.

It requires many more muscles to frown than to smile. Frowning requires the use of 43 muscles of the forehead and scalp. Smiling requires only the use of 17 muscles in the vicinity of the mouth, nose, and eyes.

Your skeleton renews itself every ten years, which means that every ten years you get a new skeleton. The only part of the body that can't repair itself is the tooth.

Control questions:

1. What are the principal (main) parts of the human body?
2. What does the head consist of?
3. What do you know about the backbone (spine)?
4. What is the chest formed by and what organs are located there?
5. What inner organs does the abdominal cavity contain?
6. What parts are the upper and lower extremities (limbs) composed of?

Lesson 6. THE HEART

I. Read and learn the following words

- | | |
|--|--|
| 1. heart [hɑ:t] <i>n</i> – сердце | 15. to contract [kən'trækt] <i>v</i> – |
| 2. to pump [pʌmp] <i>v</i> – качать, перекачивать | сокращаться |
| 3. blood [blʌd] <i>n</i> – кровь | 16. contraction [kən'trækʃn] <i>n</i> – |
| 4. to carry ['kæri] <i>v</i> – нести, переносить | сокращение |
| 5. oxygen ['ɒksɪdʒ(ə)n] <i>n</i> – кислород | 17. hollow ['hɒləv] <i>adj</i> – пустой, полый |
| 6. nutrient ['nju:triənt] <i>n</i> – питательное вещество | 18. size [saɪz] <i>n</i> – размер |
| 7. tissue ['tɪʃu:] <i>n</i> – ткань | 19. to be located [ləv'keɪtɪd] <i>v</i> – |
| 8. cell [sel] <i>n</i> – клетка | располагаться |
| 9. to remove [rɪ'mu:v] <i>v</i> – удалять | 20. chamber ['tʃeɪmbə] <i>n</i> – камера |
| 10. waste products [weɪst 'prɒdʌkts] – продукты распада | 21. atrium ['eɪtriəm] <i>n</i> – предсердие; |
| 11. to need [ni:d] <i>v</i> – нуждаться | atria ['eɪtriə] <i>n</i> – предсердия |
| 12. vital ['vaɪtl] <i>adj</i> – жизненно важный | 22. ventricle ['ventrɪkl] <i>n</i> – желудочек |
| 13. properly ['prɒpərlɪ] <i>adv</i> – правильно | 23. to separate ['sepəreɪt] <i>n</i> – разделять |
| 14. to require [rɪ'kwaɪə] <i>v</i> – нуждаться (в чем-л.), требовать (чего-л.) | 24. septum ['septəm] <i>n</i> – перегородка |
| | 25. to pass [pɑ:s] <i>n</i> – проходить |
| | 26. valve [vælv] <i>n</i> – клапан |
| | 27. to move [mu:v] <i>v</i> – двигаться |
| | 28. to return [rɪ'tə:n] <i>v</i> – возвращаться |
| | 29. vein [veɪn] <i>n</i> – вена |

- | | |
|--|--|
| 30. own [əʊn] <i>adj</i> – свой собственный | 37. average [ˈævərɪdʒ] <i>adj</i> – средний, нормальный, обычный |
| 31. involuntary [ɪnˈvɒləntəri] <i>adj</i> – непроизвольный | 38. to beat [bi:t] <i>v</i> – биться (<i>о сердце</i>) |
| 32. pacemaker [ˈpeɪs, meɪkə] <i>n</i> – водитель ритма; кардиостимулятор | 39. to affect [əˈfekt] <i>v</i> – влиять, воздействовать |
| 33. heart rate [hɑ:t reɪt] – частота сердечных сокращений | 40. to slow down [ˈsləʊ daʊn] <i>v</i> – замедлять(ся) |
| 34. to conduct [kənˈdʌkt] <i>v</i> – проводить, служить проводником | 41. exercise [ˈeksəsaɪz] <i>n</i> – упражнение |
| 35. to stimulate [ˈstimjuleɪt] <i>v</i> – (зδ.) заставлять | 42. to speed up [spi:d ʌp] <i>v</i> – ускорять(ся) |
| 36. adult [ˈædʌlt; əˈdʌlt] <i>n</i> – взрослый | |

II. Read, translate and learn the following words

material [məˈtɪəriəl]	direction [dɪˈrekʃn], [daɪˈrekʃn]
person [ˈpɜ:s(ə)n]	vein [veɪn]
function [ˈfʌŋkʃən]	natural [ˈnætʃərəl]
sodium [ˈsəʊdiəm]	to control [kənˈtrəʊl]
calcium [ˈkælsiəm]	to regulate [ˈregjuleɪt]
potassium [pəˈtæsiəm]	electrical [ɪˈlektrɪkl]
salt [sɔ:lt]	impulse [ˈɪmpʌls]
glucose [ˈglu:kəʊs]	minute [ˈmɪnɪt]
amino acid [əˌmɪnəvˈæsɪd]	emotional [ɪˌməʊʃ(ə)nəl]
normally [ˈnɔ:məli]	reaction [riˈækʃn]
muscular [ˈmʌskjʊlə]	hormonal [hɔ:ˈməʊnəl]
organ [ˈɔ:gən]	factor [ˈfæktə]

III. Read and translate the text

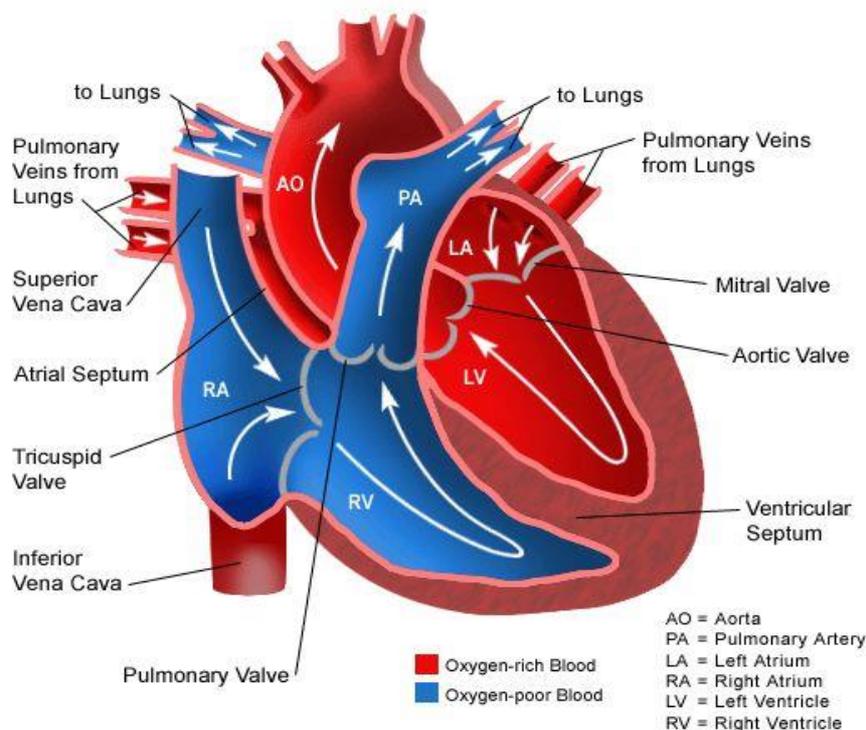
THE HEART

The heart is the most important muscle in the human body. Without the heart a person cannot live. Its function is to pump blood around the body. Blood carries oxygen and nutrients to the tissues and cells of the body and removes the waste products that we do not need. All the vital materials help our body function properly. For example, the brain requires oxygen and glucose; muscles need oxygen, glucose and amino acids, as well as sodium, calcium and potassium salts in order to contract normally.

The human heart is a hollow, muscular organ about the size of a fist. It is located in the thoracic cavity. The human heart has four chambers. The two upper chambers are known as the atria, and the two lower chambers are known as the ventricles. The left atria and left ventricle are separated from the right atria and right ventricle by the septum.

The atria contract at the same time. When the atria contract, blood passes to the ventricles. The ventricles then contract together to pump the blood out of the heart. The four heart valves open and close to keep the blood moving in the correct direction. Blood enters the right atrium, passes to the right ventricle, and moves to the lungs to become oxygenated. Then the blood returns to the left atrium and the left ventricle, which pumps the blood out to the body. Two large veins return blood from the body to the heart.

The contractions of the heart are involuntary. The heart has its own natural pacemaker, which controls and regulates the heart rate: it conducts electrical impulses that stimulate the heart muscle to contract. In adults the average heart beats about 72 times per minute and in children the heart rate is higher. Emotional reactions and hormonal factors can affect the heart rate. For example, when a person sleeps his heart slows down, but when he does exercises or feels frightened it speeds up.



IV. Guess the missing words and fill in the gaps

1. One of the most ... in the human body is
2. The person cannot ... the heart.
3. The basic function of the heart is
4. The brain needs ... and the muscles require
5. The left atria are separated from ... by
6. When ... contract, blood passes
7. The ... open and close to
8. ... return blood from the body to the heart.
9. The natural pacemaker of the heart ... the heart rate.

V. Choose correct prepositions and complete word combinations with them

(at, up, of, in, out, down, from)

1. ускорять(ся) - *to speed* ...
2. замедлять(ся) - *to slow* ...
3. в грудной клетке - ... *the thoracic cavity*
4. состоять из - *to be composed* ...
5. отделять(ся) от - *to separate* ...
6. в правильном направлении - ... *the correct direction*
7. одновременно - ... *the same time*
8. выбрасывать, выталкивать - *to pump* ...

VI. Make up word combinations and translate them

a) hormonal	cavity	b) to feel	exercises
hollow	reactions	to conduct	waste products
vital	valves	to do	oxygenated
thoracic	factors	to affect	frightened
average	organ	to remove	blood
emotional	materials	to become	heart rate
heart	heart	to return	electrical impulses

VII. Translate the sentences into English

1. Сердце – это полый мышечный орган, который находится в грудной полости.
2. Сердце имеет 4 камеры: две верхних (предсердия) и две нижних (желудочки).
3. Перегородка разделяет сердце на две части (правую и левую).
4. Кровь переносит кислород и питательные вещества ко всем клеткам, тканям и органам тела.
5. Глюкоза, аминокислоты, соли натрия, кальция и калия и другие жизненно важные вещества помогают нашему телу правильно функционировать.
6. Электрические импульсы заставляют сердечную мышцу сокращаться.
7. Частота сердечных сокращений у детей выше, чем у взрослых.

VIII. Read the statements; agree or disagree with them; give the correct version

1. The two lower chambers are known as the ventricles.
2. The function of the blood is to remove the waste products that we do not need.
3. The human heart is the size of the liver.
4. The atria contract one by one.
5. The ventricles contract to pump the blood out of the heart.
6. Blood moves from the left ventricle to the lungs to become oxygenated.
7. The oxygenated blood returns to the left atrium and the left ventricle.
8. The valves control and regulate the heart rate.
9. The contractions of the heart are voluntary.
10. The heart rate slows down when a person feels nervous.

11. Emotional and hormonal factors as well as high temperature can affect the heart rate.

IX. Compose correct sentences and translate them

1. located, in, the lungs, the human heart, is, between, the thoracic cavity;
2. waste, carries, materials, removes, products, vital, and, blood;
3. have, and, children, different, heart rates, adults
4. veins, returns, two, blood, the heart, large, the body, from, to, though;
5. the body, blood, around, the cardiac muscle, pumps;
6. speeds up, high, a person, when, heart rate, has, his, temperature.

X. Put questions to the following sentences (the type of the question is indicated in the brackets)

1. Without the heart a person cannot live (general).
2. The human heart has four chambers (special).
3. The heart contractions are involuntary (alternative).
4. The atria contract at the same time (disjunctive).
5. The brain requires oxygen and glucose (general).
6. The average heart contracts 100 000 times a day (special).
7. The heart is the most important organ in the human body (disjunctive).

XI. Read and translate the additional text

INTERESTING FACTS ABOUT THE HUMAN HEART

Each day, the average heart contracts 100,000 times and pumps about 2,000 gallons of blood through 60,000 miles of blood vessels to almost all of the body's 75 trillion cells. Only the corneas receive no blood supply.

“Atrium” is Latin for “entrance hall,” and “ventricle” is Latin for “little belly.”

In humans, the heart weighs between about 280 to 340 grams in men and 230 to 280 grams in women.

The beating sound of your heart is caused by the valves of the heart opening and closing.

Of all your muscles, the heart does the most physical work. For two hours your heart generates enough energy to lift a weight of 65 tons one foot into the air.

A woman's heart beats slightly faster than a man's heart.

Laughing is good for your heart. It reduces stress and gives a boost to your immune system.

Note: gallon [ˈgælən] n – ГАЛЛОН (АНГЛ. = 4,54 л; АМЕР. = 3,78 л)

Control questions

1. What is the heart composed of?
2. What are the basic functions of the heart?
3. What is the size of an average heart?
4. How many chambers does the heart have?

5. How does the heart work?
6. How many times per minute does the heart normally beat?
7. What factors can affect the heart rate?

Lesson 7. THE BRAIN AND THE NERVOUS SYSTEM

I. Read and remember the following words

- | | |
|--|---|
| 1. to lead [li:d] <i>v</i> – вести | 12. sight [saɪt] <i>n</i> – зрение |
| 2. cerebrum [sə'ri:brəm] <i>n</i> – большой
головной мозг | 13. to make up ['meɪk 'ʌp] <i>v</i> –
составлять, образовывать |
| 3. medulla [me'dʌlə] <i>n</i> – продолговатый
мозг | 14. to be made up of <i>v</i> – состоять из |
| 4. fibre ['faɪbə] <i>n</i> – волокно, отросток | 15. to be responsible for [rɪs'pɒnsəb(ə)l]
– отвечать за |
| 5. cell [sel] <i>n</i> – клетка | 16. cerebellum [,serɪ'beləm] <i>n</i> –
мозжечок |
| 6. impulse ['ɪmpʌls] <i>n</i> – импульс | 17. portion ['pɔ:ʃ(ə)n] <i>n</i> – отдел |
| 7. stimuli ['stɪmjulaɪ] <i>n</i> – стимулы | 18. bundle ['bʌndl] <i>n</i> – пучок |
| 8. memory ['mem(ə)rɪ] <i>n</i> – память | 19. to swallow ['swɒləʊ] <i>v</i> – глотать |
| 9. feeling ['fi:lɪŋ] <i>n</i> – чувство,
ощущение | 20. to yawn ['jɔ:n] <i>v</i> – зевать |
| 10. thought [θɔ:t] <i>n</i> – мысль | |
| 11. hearing ['hiəriŋ] <i>n</i> – слух | |

II. Read and translate the text

THE NERVOUS SYSTEM: THE BRAIN AND NERVES

Nerves lead from the spinal cord or from the brain to each part of the body. Then they lead from each part of the body back to the brain or spinal cord. The brain and spinal cord are the centres of this system of nerves.

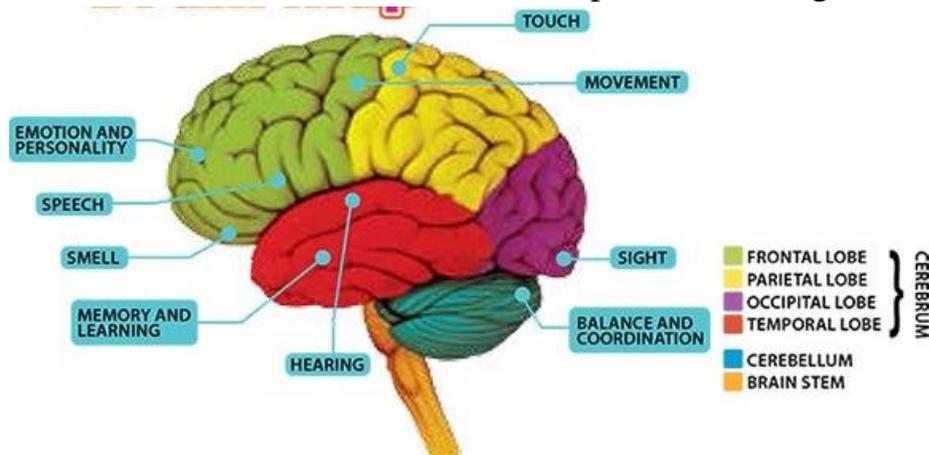
All parts of the body are connected by nerves. The nerve cells with their fibres make up the nervous system. The nerve cells send impulses to each other by means of the fibres at their ends. These fibres do not actually touch but are so close to each other that an impulse can travel from one fiber to another.

Thus all nerve cells are connected with each other. There are millions of these connecting nerve cells. Thus stimulus from any part of the body can reach any other part of it. In the spinal cord and brain, the nerve cells connect with each other by their connecting fibres. Outside the spinal cord and brain, certain long fibres are grouped together forming nerves. Each nerve is made up of thousands of nerve fibres together in a bundle, as a cable is made up of separate wires.

THE BRAIN CENTRE OF THE NERVOUS SYSTEM

We know that nerves carry impulses to the brain. The brain sends these impulses along so that they go to the right place. The brain is made up of three parts. The

cerebrum sits like a cap on the cerebellum. And the medulla is that long portion connecting the brain with the spinal cord. The cerebrum has certain parts that do certain work. Scientists have discovered that the part for thought, memory, and feeling is located in the front of the cerebrum. The part for hearing is located at the



side of the cerebrum. The back part of the cerebrum is responsible for sight. Many experiments have shown that the brain is the centre of feeling and understanding. The cerebellum is the centre for making the muscles work as a team. The medulla is the centre of our most important acts: breathing and heartbeat, on which life itself depends. The medulla is also capable of controlling acts such as swallowing and yawning.

III. Compose correct sentences and translate them

1. centers, the, system, of, cord, are, the, spinal, and, this, of, nerves, brain
2. any, body, reach, thus, of, can, a, part, from, the, part, any, other, stimulus, it, of
3. work, has, the, certain, that, parts, do, certain, cerebrum
4. made, a, of, nerve, each, thousand, is, fibres, up, in, bundle, of, nerve, together
5. making, the, your, work, a, is, team, the, as, cerebellum, for, centre, muscles
6. capable, the, controlling, acts, is, such as, yawning, and, of, swallowing, medulla

IV. Correct the following statements

1. The cerebrum and the cerebellum are the centers of this system of nerves.
2. The nerve cells with their fibres make up the serebrospinal system.
3. These fibres touch each other thus an impulse can travel from one fibre to another.
4. In the medulla the nerve cells connect with each other by their connecting fibres.
5. The scientists discovered that the part for thought, memory, and feeling is found at the side of the cerebellum.
6. The medulla is the centre of the most important acts: swallowing and yawning.

V. Put questions to the underlined words

1. The brain and spinal cord are the centres of this system of nerves.
2. The nerve cells with their fibres make up the nervous system.
3. The nerve cells send impulses to each other by means of the fibres.

4. In the spinal cord and brain the nerve cells connect with each other by the fibres.
5. The brain is made up of three parts.
6. There are millions of these connecting nerve cells.

VI. Translate the sentences into English

1. Мозг является центром нервной системы.
2. У каждой нервной клетки есть на конце отросток.
3. Отростки нервных клеток не соприкасаются друг с другом, но их импульс может проходить от одного отростка к другому.
4. Мозг состоит из трех частей: головной мозг, костный мозг, спинной мозг.
5. Передняя часть головного мозга отвечает за память, мысли и чувства.
6. Задняя часть головного мозга отвечает за зрение, а боковая часть – за слух.
7. Мозжечок является самым большим отделом головного мозга.

Control questions:

1. What are the centres of this system of nerves
2. What do you know about the structure of the nervous system?
3. How does the nervous system work?
4. How many parts is the brain made up of?
5. What did scientists find out about the brain?

Lesson 8. ANDREAS VESALIUS

I. Read and learn the words

- | | |
|---|--|
| 1. anatomist [ə' nætənist] <i>n</i> – анатом | 15. to determine [di'tə:mi:n] <i>v</i> – определять |
| 2. to publish ['pʌblɪʃ] <i>v</i> – опубликовать | 16. opening ['əʊpənɪŋ] <i>n</i> – отверстие |
| 3. joint [dʒɔɪnt] <i>n</i> – сустав | 17. discovery [dis'klʌvəri] <i>n</i> – открытие |
| 4. to describe [dis'kraɪb] <i>v</i> – описывать | 18. to consider [kən'sɪdə] <i>v</i> – считать, полагать |
| 5. muscle [mʌsl] <i>n</i> – мышца | 19. pulmonary blood circulation ['pʌlmənəri 'blʌd ,sə:kju'leɪʃ(ə)n] – малый круг кровообращения |
| 6. vessel [vesl] <i>n</i> – сосуд | 20. systemic [sɪ'stemɪk] blood circulation – большой круг кровообращения |
| 7. nerve [nə:v] <i>n</i> – нерв | 21. to establish [ɪs'tæblɪʃ] <i>v</i> – устанавливать |
| 8. digestive tract [daɪ'dʒestɪv 'trækt] пищеварительный тракт | 22. exact [ɪg'zækt] <i>adj</i> – точный |
| 9. respiratory [rɪs'praɪət(ə)rɪ] system– дыхательная система | 23. anatomical term [,ænə'tɒmɪkl tə:m] – анатомический термин |
| 10. cadaver [kə'deɪvə] <i>n</i> – труп | 24. to compose [kəm'pəuz] <i>v</i> – |
| 11. inner ['ɪnə] <i>adj</i> – внутренний | |
| 12. to take into consideration [kən,sɪdə'reɪʃn] – принимать во внимание | |
| 13. scientist ['saɪəntɪst] <i>n</i> – ученый | |

14. proper description [ˈprɒpə
dɪsˈkrɪpʃən] – правильное
описание

составлять
25. to be based on [ˈbi: beɪst ɒn] v –
основываться на

II. Read, translate and remember proper names

Andreas Vesalius [ˌænˈdrɛəs vɪˈseɪliəs], Brussels [ˈbrʌs(ə)lz], France [ˈfrɑ:ns]

III. Read and translate the text

ANDREAS VESALIUS



Andreas Vesalius is one of the greatest anatomists. He was born in Brussels in the family of pharmacists in 1514. He studied medicine in France. In 1537 he got the degree of Doctor of Medicine. In 1538 his first scientific works in anatomy were published. In 1543 his most important book “On the structure of the human body” was written. It consists of seven books. The bones of the skeleton, the joints and cartilages were described in the first book, the muscles – in the second, the vessels – in the third, the nerves – in the fourth, the digestive tract – in the fifth, the heart and the respiratory system – in the sixth, the brain in the seventh.

In all his works Vesalius studied the anatomy of the human body on cadavers. He studied the structure of the inner organs of the human body taking into consideration their functions. Vesalius was the first scientist to give a proper description of the human skeleton. He determined that the right and the left ventricles of the heart were not connected. He also determined that there were no openings in the septum between the left and the right heart chambers. It was a great discovery. Before Vesalius all the scientists considered that the left and the right heart chambers were connected by the openings in the septum. His discovery opened the way to the discovery of pulmonary and systemic blood circulations in future. Vesalius did much to establish new and exact anatomical terms.

The Great Russian scientist Pavlov said that the works written by Vesalius composed the first anatomy of the human body in which everything was based on scientific research work.

IV. Guess the missing words and fill in the gaps

1. Andreas Vesalius was born in ... in the family of ... in
2. He studied ... in ..., and in ... he got
3. In 1543 his ... was written.
4. He studied the structure of ... taking into
5. He determined that were not connected.
6. He determined that there were

7. This discovery opened the way to
8. A.Vesalius composed ... in which everything was based on

V. Fill in the right pre- and post- positions

(into, on, of, before, between, in, by)

1. There are no openings ... the septum ... the left and the right heart chambers.
2. This discovery which was made ... A.Vesalius opened the way ... the discovery ... pulmonary and systemic blood circulations ... future.
3. Studying the structure ... inner organs, A.Vesalius took ... consideration their functions.
4. The book "... the structure ... the human body" was based ... scientific work.
5. The most important book written ... A.Vesalius consisted ... the description ... different parts ... human body.
6. ... Vesalius all the scientists didn't know that the right and the left heart chambers were not connected ... the openings ... the septum.

VI. Make up word combinations and translate them

a) human respiratory inner blood research proper anatomical heart digestive great	term chambers description discovery tract organs work body circulation system
b) to study to establish to compose to consist of to get to take into to describe to give to publish	the degree joints and cartilages consideration proper description medicine exact anatomical terms scientific works seven books the first anatomy

VII. Compose correct sentences and translate them

1. the left, are, ventricles, not, of, the heart, and, the right, connected
2. was, in, A.Vesalius, born, Brussels, in 1514
3. is, the chambers, by, the heart, the septum, divided into
4. studied, inner, by, scientifically, organs, were, the, A.Vesalius

5. human, the structure, by, was, body, of, A.Vesalius, the, described
6. anatomical, A.Vesalius, were, exact, by, and, new, established, terms
7. based, new book, the, research, scientist's, is, his, work, on

VIII. Translate the following sentences into English

1. А.Везалий опубликовал свои первые научные работы в 1538 году.
2. А.Везалий описал кости скелета, суставы, хрящи, дыхательную систему и головной мозг в книге «О строении человеческого тела».
3. Правильное описание скелета человека было предложено (to give) А.Везалием.
4. Сердце и дыхательная система изучаются на занятиях по анатомии.
5. Функции внутренних органов были описаны Везалием.
6. Первая анатомия человеческого тела была составлена на основе научно-исследовательской работы.
7. Левая и правая камеры сердца разделяются перегородкой.
8. Кровеносная (circulatory) система состоит из малого и большого кругов кровообращения.

IX. Read and translate the additional text

LIFE AFTER DEATH

It was long ago, in the first half of the 16th century. Andreas Vesalius, the famous Spanish researcher and physician, was asked to dissect the corpse of the man who had just died. It was necessary to find out why he had died.

When the chest was opened all those present were horrified; they saw that the heart was still beating.

Why was the heart of the corpse contracting? How could such a physician as A. Vesalius take the living man for a corpse? Vesalius couldn't answer the question either, as the level of medical knowledge was low at that time.

People were able to answer this question only three centuries later. The fact is that there are some specific neuromuscular structures in the heart. The stimuli, on which the work of the heart depends, develop in these particular neuromuscular structures. They have a specific feature called automatism due to which the stimuli develop in those structures themselves but do not come from other regions of the nervous system. That is why the heart of a corpse can contract for some moments after death.

Words:

- | | |
|--|---|
| 1. researcher [rɪ'sɜːtʃə] – исследователь | 7. either ['aɪðə] – тоже |
| 2. to dissect [dɪ'sekt] – вскрыть | 8. level ['lev(ə)] – уровень |
| 3. corpse [kɔːps] – труп | 9. low [ləʊ] – низкий |
| 4. to die [daɪ] – умирать | 10. to be able to [bi:'eɪbl tuː] – быть способным |
| 5. to find out [faɪnd aʊt] – выяснять | |
| 6. to be horrified [bi: 'hɒrɪfaɪd] – ужасаться | 11. neuromuscular [ˌnjʊərəʊ'mʌskjʊlə] – нервно-мышечный |

12. to depend on [dɪ'pend ɒn] – зависеть от
 13. to develop [dɪ'veləp] – развиваться
 14. particular [pə'tɪkjələ] – особый
 15. automatism [ɔ:'tɒmə'tɪzəm] – автоматизм
 16. due to [dju: tu:] – благодаря, из-за

X. Answer the following questions to the text “Life After Death”

1. What new did you learn from this text about Andreas Vesalius?
2. Why was Andreas Vesalius asked to dissect the corpse?
3. Why everyone thought that the man was alive?
4. Why did the heart beat if the man was dead?

Control questions

1. Who is considered to be the founder of the modern anatomy and physiology?
2. Where did Andreas Vesalius study medicine?
3. When did A. Vesalius get the degree of Doctor of Medicine?
4. When was his most important book on human anatomy “On the Structure of the Human Body” written?
5. What books does his work "On the Structure of the Human Body" consist of?
6. What did A. Vesalius study on cadavers and how?
7. What did A. Vesalius determine and establish?
8. Who considered that the left and the right heart chambers were connected by the openings in the septum?
9. What did the Russian scientist Pavlov say about the works written by A. Vesalius?

Lesson 9. MICROBIOLOGY

I. Read, translate and learn the following words

microorganism [ˌmaɪkrəʊ'ɔ:gənɪzəm]	viruses [ˈvaɪərəsɪz]
microbe [ˈmaɪkrəʊb]	ecosystem [ˈi:kəʊ,sɪstəm]
microscopic [ˌmaɪkrə'skɒpɪk]	pathogen [ˈpæθədʒən]
bacteria [bæk'tɪəriə]	diarrhea [ˌdaɪə'riə]

II. Read and learn the words

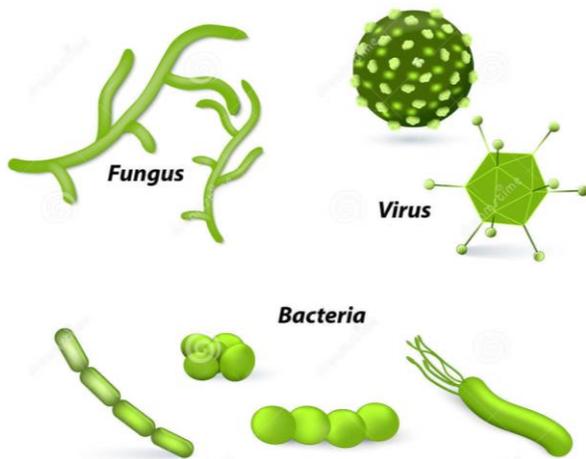
1. tiny [ˈtaɪni] *adj* – мельчайший, крошечный
2. single-celled [ˌsɪŋ(ə)l 'seld] – одноклеточный
3. invisible [ɪn'vɪzəb(ə)l] *adj* – невидимый
4. fungi [ˈfʌŋɡaɪ] *n* – грибы
5. algae [ˈældʒi:] *n* – водоросли
6. protozoa [ˌprəʊtə'zəʊə] *n* – простейшие
7. water environment [ˈwɔ:tə ɪn'vaɪ(ə)rənmənt] – водная среда
8. to make up [ˈmeɪk 'ʌp] *v* – составлять, образовывать
9. to inhabit [ɪn'hæbɪt] *v* – обитать, жить
10. beneficial [ˌbenɪ'fɪʃəl] *adj* –

- полезный, приносящий пользу
11. to survive [sə'vaɪv] *v* – выживать
 12. germ [dʒɜ:m] *n* – микроб
 13. harmful [ˈhɑ:mfəl] *adj* – вредный, приносящий вред
 14. to cause [kɔ:z] *v* – вызывать, быть причиной
 15. to spread [spred] *v* – распространяться
 16. to sneeze [sni:z] *v* – чихать
 17. to cough [kɔf] *v* – кашлять
 18. bite [baɪt] *n* – укус
 19. contaminated [kən'tæmɪneɪtɪd] –

- загрязненный, зараженный
20. to invade [ɪn'veɪd] *v* – вторгаться, внедряться
 21. poison [ˈpɔɪzən] *n* – яд
 22. to produce [prɔ'dju:s] *v* – производить, вырабатывать
 23. common [ˈkɒmən] *adj* – обычный, общий, распространенный
 24. fever [ˈfi:və] *n* – лихорадка
 25. rash [ræʃ] *n* – сыпь
 26. vomiting [ˈvɒmɪtɪŋ] *n* – рвота
 27. to protect [prə'tekt] *v* – защищать
 28. sick [sɪk] *adj* – больной

III. Read and translate the text

TEXT A MICROORGANISMS



A microorganism or microbe is a very tiny single-celled organism. It is so small that it is microscopic (invisible to the naked eye). There are different types of microorganisms: bacteria, fungi, algae, protozoa and viruses. They are the oldest form of life on Earth and are found everywhere. Microorganisms can live in the air, on land, and in fresh or salt water environments. They are found in all living things, plants and animals. There are more microorganisms on and inside the human

body than there are cells that make up the entire body. They play an important role in the ecosystems they inhabit.

Some of microorganisms are beneficial and necessary for living things to survive. Others, pathogens (or germs), can be harmful and cause diseases. These can be spread to humans from: other humans from sneezing or coughing, animals, insect bites, contaminated food or water. When microorganisms invade our bodies, they can produce toxins, which are like poisons. Those toxins cause symptoms of common infections, like fevers, colds, rashes, coughing, vomiting and diarrhea.

The best ways to protect yourself from germs are to wash your hands with soap before you eat or cook, and after using the toilet, playing outside, visiting sick people, touching animals or pets. Wash food and boil meat, eggs, fish properly.

IV. Read the words correctly and translate them

1. microorganisms, microbe, microscope, microbiology
2. pathogen, pathogenic, pathogenesis, pathology, neuropathy

3. harmful, careful, useful, powerful, colorful
4. disinfectant, discomfort, dysfunction

V. Read, translate and define the part of speech of the following words

1. protect, protection, protective, protected, non-protected
2. sick, sickness, sick-leave
3. survive, survival, survived
4. virus, viral, viruses, virology, anti-viral
5. bacterium, bacteria, bacterial, bacteriologist
6. poison, poisoning, poisonous, nonpoisonous
7. toxin, toxic, nontoxic, toxicology, intoxicate, antitoxin

VI. Substitute synonyms for the italicized parts of the sentences from the list given below. Translate the sentence into Russian

contaminated, fever, survive, invade, rash, harmful, protect, cause, sick

1. The water in this river is *polluted*.
2. When germs *come into* a human body, it may *lead to* different illnesses.
3. Sunglasses *defend* your eyes from the *bad and unhealthy* effect of the direct sun rays (лучи).
4. Our friend was *ill* and we decided to visit him.
5. Everybody is sure that the seriously ill patient will *remain alive*.
6. In the evening she saw *red spots* on her skin and had *high temperature*.

VII. Find the synonyms

To live, tiny, toxin, ill, smallest, good, poison, beneficial, to produce, bad, to survive, harmful, to cause, to inhabit, sick.

VIII. Make up word combinations and translate them

a) water	infection	b) to inhabit	properly
entire	thing	to cause	toxins
the oldest	organism	to make up	ecosystem
insect	body	to wash	a role
common	environment	to boil	the body
tiny	bite	to produce	symptoms
living	form	to play	with soap

IX. Express in one word the following word combinations

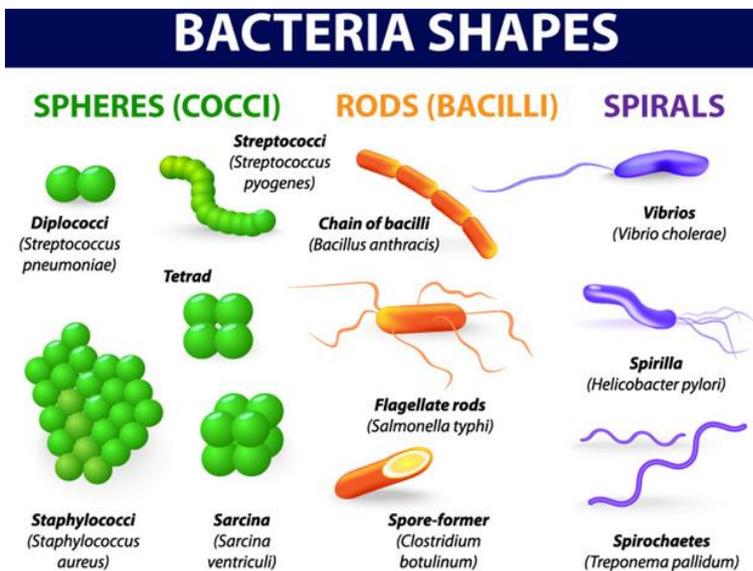
1. to make a sudden expulsion of air from the nose and mouth
2. to expel air from the lungs suddenly
3. any substance that can do harm to the human body
4. an infection when a person has a running nose and a sore throat (больное горло)
5. ejecting from the stomach through the mouth

X. Translate the sentences into English

1. Бактерии, грибы, водоросли, простейшие и вирусы - это мельчайшие одноклеточные организмы, которые не видны невооруженным глазом.
2. Микроорганизмы находятся повсюду: в воздухе, воде, земле, растениях, животных, а также внутри и снаружи человеческого тела.
3. Микроорганизмы могут быть полезными и вредоносными.
4. Полезные микроорганизмы играют важную роль в экосистеме и необходимы для жизни живых существ.
5. Микробы передаются человеку от других людей при кашле и чихании, от животных, загрязненной воды и еды.
6. Наиболее распространенными симптомами инфекций являются лихорадка, рвота, диарея и кашель.
7. Микробы являются причиной различных заболеваний.
8. Люди должны мыть руки с мылом перед едой и приготовлением пищи.

XI. Read the text using a dictionary

TEXT B TYPES OF MICROORGANISMS

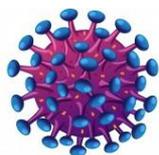


Bacteria are single-celled spherical, spiral or rod-shaped organisms. Some bacteria cells exist as individuals while others cluster together to form pairs, chains, squares or other groupings. Vast numbers of bacteria live in, and on, our bodies. Some bacteria help us digest food, destroy disease-causing cells and give the body needed vitamins. Yoghurt is made by boiling milk and adding special bacteria to it. The

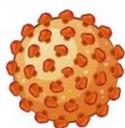
bacteria turn the sugar in the milk into acid. The acid makes the milk go thick and stops any harmful bacteria growing. However, some types of infectious bacteria can make you ill. Examples include *Salmonella enteritidis* which causes food poisoning and *Streptococcus pyogenes* which causes sore throats.

Fungi can be of many different sizes and they are mushrooms, yeast in bread and beer and wine, bread mould. When bread is made, yeast is added to the dough to make the bread rise. The yeast turns the sugar into alcohol and a gas called carbon dioxide. As the dough is heated, the bubbles of gas get bigger, and the bread rises.

Viruses are the smallest of the microorganisms and can only be seen with a very powerful microscope. They are also included into microorganisms although they cannot live or reproduce on their own. They are particles, not cells; they consist of DNA (deoxyribonucleic acid) or RNA (ribonucleic acid), but not both. Viruses are



HIV



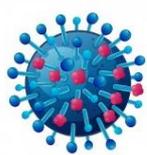
Hepatitis B



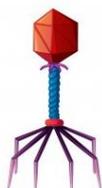
Ebola Virus



Adenovirus



Influenza



Bacteriophage

parasites which means they can only survive inside the cells of other living things! They invade the cells and multiply, killing the host cells. This is what makes people sick. Viruses are easily destroyed by disinfectants outside the body, but can be difficult to eliminate once infection has taken place. Examples of viral infections are: AIDS, chicken pox, the flu, common cold, hepatitis, rubella, conjunctivitis, etc. Some viruses can transform normal cells to cancer cells.

XII. Find the English equivalents in the “Text B” to the following word combinations

Огромное число (количество) бактерий; разрушают болезнетворные клетки; необходимые витамины; кислота останавливает рост вредных бактерий; инфекционные бактерии могут приводить к болезни; вызывать пищевое отравление; больное горло; грибы и дрожжи; состоят из ДНК или РНК; выживают внутри клеток.

XIII. Divide into the groups. Read the information about the types of microorganisms and finish the sentences

1. Bacteria can be of different shape ...
2. Bacteria added in yoghurt ...
3. Salmonella bacteria cause ...
4. Fungi can be present in ...
5. The bread rises because ...
6. Viruses differ from other microorganisms because ...
7. Parasite is an organism which ...
8. Viruses can be killed by ...
9. I know that viruses cause such diseases as ...

XIV. Fill in the table using the information from the texts A and B

Beneficial effects	Harmful effects

XV. Put questions to the underlined words and translate the sentences

1. Microorganisms include bacteria, viruses, fungi, algae and protozoa.
2. Bacterium consists of one cell.

3. Some microbes produce toxins.
4. Microorganisms can live in the air, water and soil.
5. You can protect yourself by washing hands and boiling meat properly.
6. The bacteria turn the sugar in the milk into acid.
7. Streptococcus causes sore throats.
8. Viruses can only survive inside the cells of other living things.
9. Viruses are easily destroyed by disinfectants outside the body.

XVI. Translate the following sentences into English using the modal verbs

1. Полезные бактерии помогают переваривать пищу и синтезировать (to synthesize) необходимые витамины.
2. Некоторые болезнетворные бактерии вызывают пищевые отравления.
3. Вирусы можно увидеть только под мощным микроскопом.
4. Вам следует кипятить молоко, чтобы убить бактерий.
5. Вирусы не могут жить и размножаться самостоятельно.
6. Дрожжи могут превращать сахар в алкоголь и углекислый газ.
7. Чтобы выжить, вирусы должны внедриться в клетку и размножиться там.
8. В настоящее время врачи не могут вылечить СПИД.

Control questions

1. What is a microorganism? What microorganisms do you know?
2. How can we see microbes?
3. Where can we find microbes?
4. How many microorganisms are there on and inside the human body?
5. Are microorganisms beneficial or harmful?
6. How can diseases spread to humans?
7. What makes people ill?
8. What are the ways to protect oneself from germs?

Lesson 10. JOSEPH LISTER

I. Read, translate and learn the following words

a) Joseph Lister [ˈdʒəʊzɪf ˈlɪstə], Upton [ˈʌptən], Edinburgh [ˈedɪnb(ə)rə], London [ˈlʌndən], James Syme [dʒeɪms saɪm], Glasgow [ˈglɑːzɡəv], Louis Pasteur [ˈluːi pæsˈtəː].

b) antiseptic [ˌæntɪˈseptɪk]
 assist [əˈsɪst]
 temperature [ˈtemprɪtʃə]
 effect [ɪˈfekt]

gangrene [ˈgæŋɡriːn]
 disinfectant [ˌdɪsɪnˈfektənt]
 mask [mɑːsk]
 sterilizer [ˈsterɪlaɪzə]

II. Read and translate the text

JOSEPH LISTER



Joseph Lister (1827 - 1912), an English surgeon was born at Upton, Essex. He was the founder of antiseptic surgery. Joseph Lister was the first to discover the reasons for infection and the way to prevent it.

Joseph Lister became interested in science very early; when he was 14 he told his father that he was sure he wanted to be a surgeon. His medical training at the University College of London lasted for nearly eight years. Then he went to Edinburgh where he assisted James Syme in his operations. In 1850-s Lister was asked to take charge of the surgical section of Glasgow's Royal Infirmary.

To understand the great work which Joseph Lister did, we must know the conditions in the hospitals in the early 19th century. Because of the terrible pain the surgeon had to operate as quickly as possible. The instruments were often not even washed. At the end of each operation they were put into a drawer in the operating rooms ready for the next operation. The surgeon set to work in the clothes he wore every day. No wonder that nearly half the people died from blood poisoning after operations. A day or two after the operation the wound became red and inflamed, the patient had temperature and often died. The surgeons were not indifferent or careless. They had simply no understanding at all of the bad effect of dirt.

Louis Pasteur's papers brought by Lister's friend were a revolution to Lister. The French scientist wrote that gangrene was caused not by air itself, but by tiny organisms called bacteria or germs in the air and they caused the inflammation of wounds after operations. Lister supposed that microbes could come not only from the air, but also from other sources: dirty hands of the surgeons, badly washed instruments. At once Lister set to work to find a way of preventing these microbes from reaching the open wound.

The first disinfectant used by Lister was carbolic acid. Once he had to operate on a boy whose leg was broken so badly that a broken bone could be seen. Before the operation he saturated his hands, instruments and everything that came in contact with the patient with the disinfectant. He cleaned the wound, set the broken bone and then covered the wound with the bandage soaked in carbolic acid. The acid did what Lister expected: it killed the germs. After four days there was no sign of fever or inflammation.

The discovery of asepsis (the control of infection) created a new kind of surgery. Today the surgeon, his assistants, the nurses all wear gowns, caps, masks, rubber gloves that have been treated with steam to kill any germ on them. The surgical instruments are similarly treated with steam in a vessel called sterilizer. Joseph Lister won the battle against germs in the operating wards.

III. Find the English equivalents to the following words and word combinations in the text and learn them

- | | |
|---------------------------------------|--|
| 1. хирург | 18. вредное воздействие грязи |
| 2. хирургия | 19. вызывать воспаление |
| 3. основатель | 20. источник инфекции |
| 4. обучение в колледже | 21. открытая рана |
| 5. причины инфекции | 22. дезинфицирующее средство |
| 6. способы предотвращения инфекции | 23. пропитывать дезинфицирующим средством |
| 7. заинтересоваться наукой | 24. вправить сломанную кость |
| 8. обучение в колледже | 25. наложить повязку |
| 9. возглавить хирургическое отделение | 26. пропитывать карболовой кислотой |
| 10. ассистировать при операциях | 27. ожидать |
| 11. условия в больницах | 28. убивать микробы |
| 12. длиться, продолжаться | 29. признак, симптом |
| 13. операционные (палаты) | 30. лихорадка |
| 14. приступить к работе | 31. открытие асептики |
| 15. умирать | 32. создавать |
| 16. заражение крови | 33. обрабатывать паром халаты, шапочки, перчатки |
| 17. воспаляться | 34. стерилизатор |

IV. Substitute synonyms for the italicized parts of the sentences from the list given below and translate the sentences

germs; no wonder; disinfectant; to take charge; reason; fever; careless; antiseptic; infirmary; sign; patient.

1. He *is responsible* for the organization of the conference.
2. The wound was infected with *bacteria*.
3. He was *inattentive* when he was writing a dictation and made a lot of mistakes.
4. There were too many patients in the city *hospital* during the epidemic of smallpox.
5. The *sick person* has all *symptoms* of the flu: headache, weakness, *high temperature*.
6. The bandage for a wound must be *free from bacteria*.
7. Lister saturated everything that came in contact with the wound with *a special substance which could kill the germs*.
8. *It is not surprising* that he has got learning problems. He is so indifferent and careless!
9. The *causes* of genetic diseases are still unknown.

V. Read, translate and define the part of speech of the following words

1. surgeon, surgery, surgical
2. operation, to operate on, operating

3. disinfectant, to infect, infection, infectious
4. inflammation, to inflame, inflamed
5. assistance, to assist, assistant
6. prevention, to prevent, preventive

VI. Fill in the right pre- and post- positions

(with, in, into, on, by, from, before, after)

1. The wound was covered ... a bandage.
2. The surgeon is operating ... a boy ... a broken arm now.
3. Many people died ... different infections ... the past.
4. The reasons ... blood poisoning ... operations were unknown ... the 19th century.
5. Everything that come ... contact ... a patient is saturated ... a disinfectant.
6. Respiratory symptoms ... small children are usually caused ... adenoviruses.
7. The instruments have been treated ... steam and now they are ready ... the next operation.
8. ... operations all surgical instruments are put ... a sterilizer.
9. J. Lister became interested ... surgery when he was a boy.

VII. Make up word combinations and translate them

a) terrible	leg	b) to have	the reasons
bad	training	to wear	papers
broken	hands	to kill	temperature
medical	effect	to win	gowns
surgical	gloves	to discover	inflamed
dirty	pain	to bring	the battle
rubber	instruments	to become	germs

VIII. Point out the word combinations related to surgical operations and translate them

To bandage a wound; to saturate with a disinfectant; to carry out a work; to prevent infection; to set a broken bone; to be indifferent; to treat surgical instruments with steam; to clean a wound; to wash hands before an operation; to use a litmus paper; to put on a gown, a cap, a surgical mask and rubber gloves; to practice medicine; to assist during operations; to wash test-tubes and culture plates.

IX. Read the statements; agree or disagree with them; give the correct version

1. Joseph Lister is known as the discoverer of vaccination.
2. J. Lister became interested in surgery when he was a boy.
3. To understand J. Lister's discovery, we must know the conditions in operating wards in the early 19th century.
4. In the early 19th century all surgical instruments were treated with a disinfectant before operations.

5. When Lister began his work as a surgeon cases of blood poisoning after operations were very rare.
6. In the 19th century the surgeons knew very little about the bad effect of dirt.
7. L. Pasteur wrote that germs caused the inflammation of wounds after operations.
8. Lister paid no attention to the work written by Louis Pasteur.
9. Lister knew that microbes could come only from the air.
10. As Lister saturated everything that came in contact with the patient with carbolic acid before the operation, there was no inflammation of wound.
11. J. Lister found the way of preventing the infection after operations.
12. The discovery of a disinfectant created a new kind of surgery.
13. Nowadays all surgical instruments are treated with carbolic acid.

X. Translate the following sentences into English

1. Открытие антисептической хирургии было настоящей революцией в медицине.
2. Он возглавляет отделение инфекционных болезней в нашей больнице.
3. Его рана воспалилась и вызывала сильную боль.
4. В этой больнице не очень хорошие условия.
5. Предотвращение инфекции – важнейшее условие хирургических операций.
6. Гангрена вызывается не самим воздухом, а бактериями, которые в нем находятся.
7. После операции на рану накладывается повязка.
8. Хирург осмотрел рану и сказал, что необходима операция.
9. Медсестра ухаживает за больными, которым была сделана операция.
10. Все хирургические инструменты обрабатываются паром в стерилизаторе.
11. До открытия асептики многие пациенты умирали от заражения крови.

XI. Prove the following statements

1. The conditions in the hospitals in the early 19th century were terrible.
2. L. Pasteur's ideas helped J. Lister to find the way of preventing the infection of wounds after operations.
3. Joseph Lister won the battle against germs in the operating wards.
4. Today we have a new kind of surgery – antiseptic surgery.

Control questions

1. What is Joseph Lister famous for?
2. Where did he study medicine?
3. How long did his medical training last?
4. Where did he begin his medical career?
5. What were the conditions in hospital in the 19th century?
6. What helped Lister to make his discovery?
7. How did Lister hope to prevent the inflammation of wounds?
8. What disinfectant did he use?

9. What was his first operation with antiseptic measures? Was it successful?
 10. What aseptic measures are taken in modern surgery?

Lesson 11. EDWARD JENNER

I. Read, translate and learn the following words

a) Edward Jenner ['edwəd 'dʒenə], Europe ['jʊərəp], Berkeley [ba:kli], St. George's Hospital [sənt'dʒɔ:dʒɪz 'hɒspɪtl], France ['frɑ:ns], Germany ['dʒɜ:məni], Spain [speɪn], Austria ['ɒstriə], Egypt ['i:dʒɪpt], China ['tʃaɪnə].

- | | |
|--------------------------------|---------------------------|
| b) practically ['præktɪk(ə)li] | absolutely ['æbsəlu:tli] |
| civilized ['sɪvɪlaɪzd] | experiment [ɪks'perɪmənt] |
| vaccinate ['væksɪneɪt] | result [rɪ'zʌlt] |
| vaccination [ˌvæksɪ'neɪʃən] | method ['meθəd] |
| practice ['præktɪs] | procedure [prə'si:dʒə] |
| immunity [ɪ'mju:nɪti] | magic ['mædʒɪk] |
| detailed ['di:teɪld] | Parliament ['pɑ:ləmənt] |
| preventive [prɪ'ventɪv] | doctrine ['dɒktrɪn] |

II. Read and translate the text

EDWARD JENNER

Today smallpox is practically unknown in civilized countries because every infant, when it is about one year old is vaccinated against this disease. But in the 18th century the whole world feared smallpox. One out of every five persons in London carried the marks of the disease on his face. It was the same in other countries of Europe. But these were the people who recovered from the disease. In those days smallpox was one of the chief causes of death.

It was Edward Jenner (1749 - 1823) an English physician, the discoverer of vaccination who saved the world from this disease. Edward Jenner was born in Berkeley, England. He liked to observe and investigate things ever since he was a boy and was always trying to gain knowledge. This led to the discovery of vaccination against smallpox.



Jenner studied medicine in London, at St. George's Hospital. He began practice in Berkeley when he was 24 years old. Once a milkmaid said to him: "I can't catch smallpox as I've had cowpox." Jenner began to think about the milkmaid's words. He asked himself a question: "Could the harmless cowpox give immunity to smallpox?" Jenner made a detailed study of all dairy diseases. He believed that only one kind could be the preventive against smallpox. It took him fourteen years to find the answer.

On May 14, 1796 Edward Jenner accomplished one of the most important tasks in the history of medicine.

He vaccinated little Jimmy Phipps, the eight-year-old son of his neighbour with matter from cowpox vesicles. He squeezed that matter from the hands of a milkmaid. Several weeks later Jenner infected the boy with smallpox matter. The next few days were the most exciting in Jenner's life. But time passed, and the boy remained absolutely free from the disease. During the next two years Jenner repeated his experiment 23 times and felt certain enough of the truth of his discovery to publish the results.

In 1798 he published an account where he called his new method "vaccination" (the Latin word "vacca" means "a cow"). At first people paid no attention to the work of the country doctor. But soon doctors began to believe in vaccination.

The news of the wonderful discovery spread abroad. People rushed to their doctors to be vaccinated. Very soon there was no part of the world that had not taken up vaccination. France, Germany, Spain and Austria were the first. In America, Egypt, China the procedure was done on thousands of people, and terrible smallpox began to disappear as if by magic. Honours and gifts from all over the world came to Jenner. "I hope, - said Jenner, - that someday the practice of producing cowpox in human beings will spread over the world. When that day comes, there will be no more smallpox."

Edward Jenner died at Berkeley in 1823, aged 74. To his last days the country doctor lived simply spending on research the money which Parliament granted him and vaccinating free of charge anyone who came to him.

We ought to remember that Edward Jenner brought into common use the doctrine of preventive medicine.

III. Find the English equivalents to the following words and word combinations in the text and learn them

- | | |
|-----------------------------------|---|
| 1. оспа | 16. безвредный, безопасный |
| 2. вакцинировать | 17. дать иммунитет |
| 3. вакцинация | 18. тщательное исследование |
| 4. младенец | 19. заболевания молочного скота |
| 5. носить следы болезни | 20. являться профилактическим средством |
| 6. то же самое | 21. верить, полагать |
| 7. выздоравливать | 22. найти ответ |
| 8. одна из основных причин смерти | 23. выполнить, завершить задачу |
| 9. спасти мир от болезни | 24. пузырьки коровьей оспы |
| 10. наблюдать | 25. вещество |
| 11. исследовать | 26. оставаться здоровым, не заболеть |
| 12. открытие, открывать | 27. повторить эксперимент |
| 13. доярка | 28. опубликовать отчет |
| 14. заразиться оспой | 29. означать |
| 15. заразить оспой | |

- | | |
|--------------------------------------|------------------------------------|
| 30. не обратить внимания на что-либо | 33. тратить деньги на исследование |
| 31. распространяться | 34. доктрина профилактической |
| 32. исчезать | медицины |

IV. Guess the missing words and fill in the gaps

1. In the 18th century people feared ... because it was one
2. Every fifth person in ... carried
3. Edward Jenner, ..., the discoverer of vaccination saved
4. E.Jenner studied medicine ... and began practice in
5. He believed that only ... of all dairy diseases could be ... smallpox.
6. During ... Jenner repeated his experiment ... and felt certain enough of ... to publish
7. ... there was no part of the world that
8. In ... the operation was done on ..., and terrible smallpox began to
9. We ... remember that E.Jenner brought ... the doctrine of

V. Find the antonyms to the following words in the text and translate them

Harmful, boring, uncertain, to appear, to fall ill, an adult, life, to live

VI. Find the synonyms to the following word combinations in the text and translate them

1. main causes
2. to be frightened
3. the disease of cows
4. to consider
5. to make sure of something
6. to study
7. to watch
8. to get knowledge
9. to carry out a task
10. to take the matter
11. to give the name
12. to be healthy
13. to publish the findings
14. to do once again
15. an awful smallpox
16. people
17. without money
18. to give money

VII. Read, translate and define the part of speech of the following words

1. to infect, infecting, infected, infection, infectious
2. to vaccinate, vaccinated, vaccinating, vaccine, vaccination
3. to cause, cause, caused, causing
4. to immunize, immune, immunity, immunization, immunology
5. to appear, to disappear, appearance, disappearance
6. to believe, belief, unbelievable
7. to produce, production, producing, product
8. to discover, discovery, discoverer
9. to excite, excitement, exciting, excited
10. to accomplish, accomplishment
11. to practice, practice, practical, impractical, practically, practitioner
12. to know, known, unknown, knowledge
13. to mean, meaning, meaningful, meanwhile
14. medicine, medical, medication, paramedic
15. harm, harmless, harmful

VIII. Make up word combinations and translate them

a) preventive	use	b) to begin	smallpox
cowpox	countries	to spread	money
common	task	to repeat	practice
civilized	discovery	to fear	discovery
harmless	medicine	to spend	things
important	vesicles	to lead to	abroad
wonderful	cowpox	to investigate	experiment

IX. Read the statements; agree or disagree with them; give the correct version

1. Some people recovered from smallpox in London in the 18th century.
2. Nowadays infants are not vaccinated against smallpox.
3. In his childhood E.Jenner gained knowledge while observing and investigating things.
4. E.Jenner was sure that the harmless cowpox couldn't give immunity to smallpox.
5. On May 14, 1786 E.Jenner accomplished one of the most important tasks in the history of medicine.
6. During the experiment E.Jenner first infected the boy with smallpox matter and then vaccinated him with matter from cowpox vesicles.
7. To give the name to his new method E.Jenner used the Latin word 'vacca' meaning 'a cow'.
8. At once doctors from many countries paid attention to E.Jenner's discovery.
9. The practice of producing cowpox in human beings spread all over the world.

X. Translate the following sentences into English

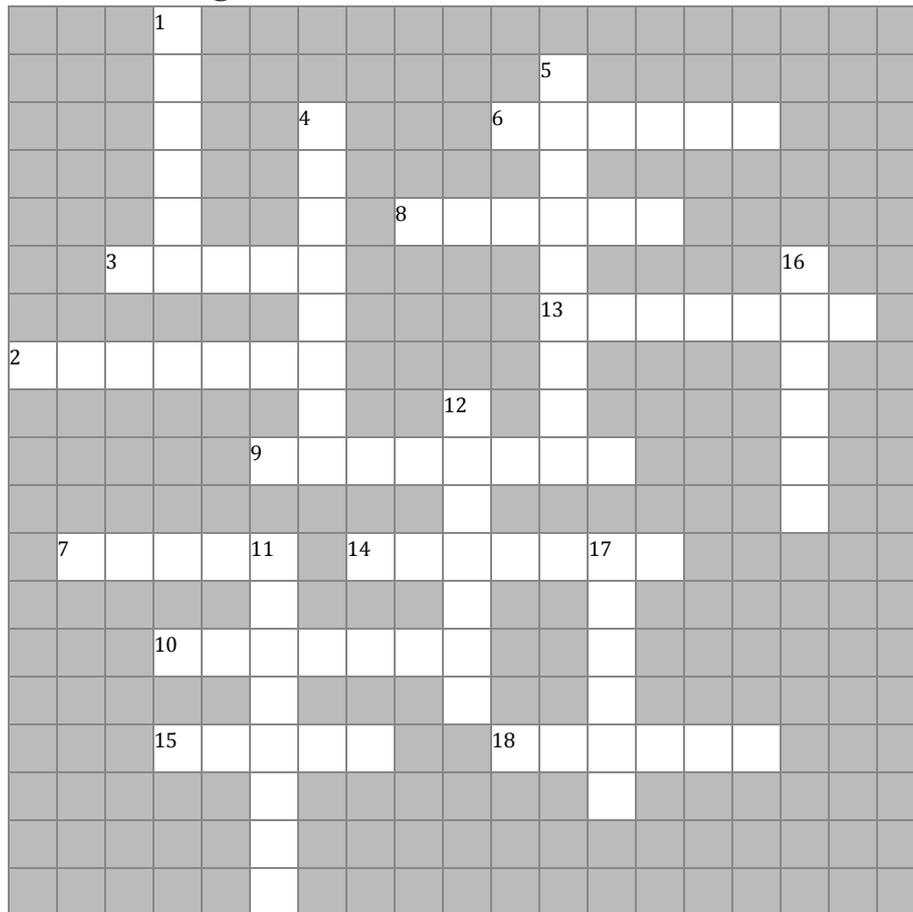
1. До открытия вакцинации инфекционные (infectious) болезни были одной из основных причин смерти людей.
2. Э. Дженнер показал, что инфекционные болезни можно предотвратить с помощью прививок (вакцинаций).
3. Тщательное изучение болезней молочного скота, помогло Э. Дженнеру найти тот вид коровьей оспы, который давал иммунитет к человеческой оспе.
4. Вещество, которое было взято из пузырьков коровьей оспы на руках доярки, было использовано как вакцина против оспы.
5. Э. Дженнер верил в большое будущее метода, который он открыл.
6. Профилактическая медицина помогает предотвратить многие болезни.
7. Э. Дженнеру потребовалось 14 лет, чтобы создать вакцину от оспы.
8. До конца своих дней Э.Дженнер проводил исследования и вакцинировал всех людей бесплатно.

XI. Make up 8 questions of different types to the text “Edward Jenner”

Control questions

- 1) When and where was Edward Jenner born? Where did he get education?
- 2) Was smallpox a deadly disease in the 18th century?
- 3) How did Jenner come to the idea of vaccination?
- 4) When did he make the first vaccination?
- 5) How was his first experiment carried out?
- 6) Why did he call his method vaccination?
- 7) What were the results of vaccination against smallpox all over the world?
- 8) What did Jenner do during the last years of his life?
- 9) Why was Jenner’s discovery so important?
- 10) Are people vaccinated against smallpox nowadays? Why?

Revision Do the following crossword



Across

- 2. to become healthy again after an illness
- 3. the hollow muscular organ that pumps blood
- 6. the chest
- 7. an abnormally high temperature
- 8. a toxic substance that can cause damage or death
- 9. a spinal column
- 10. a pathological condition caused by infection, stress, etc.
- 13. an enclosed space, cavity (for example, in the heart)
- 14. the organ of the alimentary canal in which food is stored and digested
- 15. the permanent end of all functions of life in an organism
- 18. a colourless odourless gas that all living things depend on to breathe.

Down

- 1. a tissue capable of contraction and relaxation to produce movement in an organ
- 4. a very large group of microorganisms
- 5. a person who treats diseases, a doctor
- 11. a scientific investigation, a study
- 12. the cavity below the diaphragm that contains inner organs
- 16. a tube that transports such body fluids as blood and lymph
- 17. a small triangular bone at the end of the spinal column in man, a vestigial tail

Приложение

Таблица неправильных глаголов

IRREGULAR VERBS			
VERB	PAST SIMPLE	PAST PARTICIPLE	ПЕРЕВОД
be [bi:]	was [wɔz] were [wə:]	been [bi:n]	Быть
beat [bi:t]	beat [bi:t]	beaten [ˈbi:tn]	Бить
become [biˈkʌm]	became [biˈkeɪm]	become [biˈkʌm]	Становиться
begin [biˈɡɪn]	began [biˈɡæn]	begun [biˈɡʌn]	Начинать
bend [bend]	bent [bent]	bent [bent]	Сгибать(ся)
bite [baɪt]	bit [bɪt]	bitten [ˈbɪtn]	Кусать
break [breɪk]	broke [brʊk]	broken [ˈbrʊk(ə)n]	Ломать, разбивать
bring [brɪŋ]	brought [brɔ:t]	brought [brɔ:t]	Приносить
build [bɪld]	built [bɪlt]	built [bɪlt]	Строить
burn [bɜ:n]	burnt [bɜ:nt]	burnt [bɜ:nt]	Гореть
buy [baɪ]	bought [bɔ:t]	bought [bɔ:t]	Покупать
catch [kæʃ]	caught [kɔ:t]	caught [kɔ:t]	Ловить, хватать, успеть
choose [tʃu:z]	chose [tʃəʊz]	chosen [ˈtʃəʊzn]	Выбирать
come [kʌm]	came [keɪm]	come [kʌm]	Приходить
cost [kɔst]	cost [kɔst]	cost [kɔst]	Стоить
cut [kʌt]	cut [kʌt]	cut [kʌt]	Резать
do [du:]	did [dɪd]	done [dʌn]	Делать
draw [drɔ:]	drew [dru:]	drawn [drɔ:n]	Рисовать, тащить
dream [dri:m]	dreamt [dremt]	dreamt [dremt]	Мечтать, дремать
drink [drɪŋk]	drank [dræŋk]	drunk [drʌŋk]	Пить
drive [draɪv]	drove [drouv]	driven [ˈdrɪvn]	Водить
eat [i:t]	ate [et]	eaten [ˈi:tn]	Есть
fall [fɔ:l]	fell [fel]	fallen [ˈfɔ:l(ə)n]	Падать
feed [fi:d]	fed [fed]	fed [fed]	Кормить
feel [fi:l]	felt [felt]	felt [felt]	Чувствовать
fight [faɪt]	fought [fɔ:t]	fought [fɔ:t]	Бороться

find [faɪnd]	found [faʊnd]	found [faʊnd]	Находить
fly [flaɪ]	flew [flu:]	flown [flaʊn]	Летать
forget [fə`get]	forgot [fə`gɒt]	forgotten [fə`gɒtn]	Забывать
forgive [fə`gɪv]	forgave [fə`geɪv]	forgiven [fə`gɪvn]	Прощать
freeze [fri:z]	froze [frouz]	frozen [`frouzn]	Замерзать
get [get]	got [gɒt]	got [gɒt]	Получать
give [gɪv]	gave [geɪv]	given [gɪvn]	Давать
go [gəʊ]	went [went]	gone [gɒn]	Идти
grow [grəʊ]	grew [gru:]	grown [grəʊn]	Расти
have [hæv]	had [hæd]	had [hæd]	Иметь
hear [hiə]	heard [hə:d]	heard [hə:d]	Слышать
hold [həʊld]	held [held]	held [held]	Держать
hurt [hɜ:t]	hurt [hɜ:t]	hurt [hɜ:t]	Ушибить, ранить
keep [ki:p]	kept [kept]	kept [kept]	Держать, хранить
know [nəʊ]	knew [nju:]	known [nəʊn]	Знать
lay [lei]	laid [leid]	laid [leid]	Класть
lead [li:d]	led [led]	led [led]	Вести
learn [lɜ:n]	learnt [lɜ:nt]	learnt [lɜ:nt]	Учить
leave [li:v]	left [left]	left [left]	Оставлять
let [let]	let [let]	let [let]	Позволять
lie [lai]	lay [lei]	lain [leɪn]	Лежать
lose [lu:z]	lost [lɒst]	lost [lɒst]	Терять
make [meɪk]	made [meɪd]	made [meɪd]	Производить, делать
mean [mi:n]	meant [ment]	meant [ment]	Значить
meet [mi:t]	met [met]	met [met]	Встречать
mistake [mis`teɪk]	mistook [mis`tu:k]	mistaken [mis`teɪk(ə)n]	Ошибаться
pay [pei]	paid [peɪd]	paid [peɪd]	Платить
prove [pru:v]	proved [pru:vd]	proved [pru:vd] proven [pru:vn]	Доказывать
put [put]	put [put]	put [put]	Положить
read [ri:d]	read [red]	read [red]	Читать

ring [riŋ]	rang [ræŋ]	rung [rʌŋ]	Звонить
rise [raiz]	rose [rouz]	risen [ˈrizn]	Подниматься
run [rʌn]	ran [ræn]	run [rʌn]	Бежать
say [sei]	said [sed]	said [sed]	Сказать
see [si:]	saw [sɔ:]	seen [si:n]	Видеть
sell [sel]	sold [sould]	sold [sould]	Продавать
send [send]	sent [sent]	sent [sent]	Посылать
set [set]	set [set]	set [set]	Ставить, устанавливать
show [ʃou]	showed [ʃoud]	shown [ʃoun]	Показывать
shut [ʃʌt]	shut [ʃʌt]	shut [ʃʌt]	Закрывать
sing [siŋ]	sang [sæŋ]	sung [sʌŋ]	Петь
sit [sit]	sat [sæt]	sat [sæt]	Сидеть
sleep [sli:p]	slept [slept]	slept [slept]	Спать
speak [spi:k]	spoke [spouk]	spoken [ˈspouk(ə)n]	Говорить
spend [spend]	spent [spent]	spent [spent]	Тратить, проводить
spread [spred]	spread [spred]	spread [spred]	Распространяться
stand [stænd]	stood [stud]	stood [stud]	Стоять
swell [swel]	swelled [sweld]	swollen [ˈswoul(ə)n]	Опухать
swim [swim]	swam [swæm]	swum [swʌm]	Плывать
take [teik]	took [tuk]	taken [ˈteik(ə)n]	Брать, взять
teach [ti:tʃ]	taught [tɔ:t]	taught [tɔ:t]	Обучать
tell [tel]	told [tould]	told [tould]	Рассказывать
think [θiŋk]	thought [θɔ:t]	thought [θɔ:t]	Думать
throw [θrou]	threw [θru:]	thrown [θroun]	Бросать
understand [ˌʌndəˈstænd]	understood [ˌʌndəˈstud]	understood [ˌʌndəˈstud]	Понимать
wake [weik]	woke [wouk]	woken [ˈwouk(ə)n]	Просыпаться
wear [weə]	wore [wɔ:]	worn [wɔ:n]	Носить (одежда)
win [win]	won [wʌn]	won [wʌn]	Выигрывать
write [rait]	wrote [rout]	written [ˈritn]	Писать

Фразы и слова для собеседования по экзаменационным темам

1. Let us/Let's/Let me – Разрешите, давайте
2. To begin with – Для начала, Начиная с
3. I would like to start with (to tell you about, to point out that) – Я хотел бы начать с (рассказать вам о, заметить, что)
4. As to / As for – Что касается
5. First of all – Прежде всего Сначала
6. At first – Вначале, сначала
7. First – Сначала, во-первых
8. Most of all – Больше всего
9. Moreover – Более того
10. In any case / Anyway – В любом случае / Все-таки
11. In other words – Другими словами
12. The thing / fact / point is that – Дело в том, что
13. Actually – Вообще-то
14. Also – Также
15. Besides – Кроме того
16. In addition – Вдобавок, к тому же
17. By the way – Кстати, между прочим
18. In other words – Другими словами
19. In short, in brief, in a word – Короче
20. Instead of – Вместо того, чтобы
21. Generally – В целом, в общем
22. So (that) – Чтобы / Для того, чтобы
23. Indeed – На самом деле, в действительности
24. So – Поэтому, так что, следовательно
25. However – Однако, тем не менее, все-таки
26. On the one hand, ..., on the other hand, ... – С одной стороны, с другой стороны...
27. Nevertheless – Все же, тем не менее, несмотря на
28. In spite of – Несмотря на
29. Still – Тем не менее
30. After all – В конце концов
31. And so on – И так далее
32. To sum it up – Подводя итог
33. All in all – В целом
34. So – Итак / Таким образом
35. Well – Ну
36. I think / I believe / I guess / I consider – Я думаю, я считаю, я предполагаю
37. In my opinion – На мой взгляд, по моему мнению
38. To tell (you) the truth – По правде говоря
39. Perhaps / Maybe – Может быть
40. Probably – Наверное

41. Fortunately – К счастью
42. Unfortunately – К сожалению
43. Frankly speaking – Честно говоря
44. It seems that – Кажется, что
45. It's possible that – Возможно, что
46. It's interesting to note that – Интересно отметить, что
47. As far as I know – Как мне известно
48. As I said before – Как я сказал раньше
49. It's worth mentioning that – Стоит упомянуть, что
50. Talking /speaking about – Говоря о
51. It is important to know / remember that – Важно знать / помнить, что
52. If I'm not mistaken – Если я не ошибаюсь

Вопросы к экзамену по английскому языку

1. How many faculties does our academy have and who is at the head of ISMA, its faculties and departments (chairs)?
2. What are the forms of study in the preclinical years at ISMA?
3. What do the students do during the clinical years at our academy?
4. How do the students complete their undergraduate education and continue professional training?
5. How can a candidate enter a medical school in Great Britain? Is education free of charge?
6. What is the training during the preclinical and clinical years at the British medical schools?
7. What do you know about exams and finals at the British medical schools?
8. What degrees do the students obtain (get) in Great Britain and how can they continue their education after the graduation?
9. What symbols of medicine do you know?
10. What must you do to become a good doctor?
11. What are the most important features of a good doctor?
12. Do you think your future profession is difficult? Why is it difficult?
13. What are the principal (main) parts of the human body?
14. What does the head consist of?
15. What is a chest (thorax) and what is the chest composed of?
16. What are the principal organs in the abdominal cavity?
17. What is the heart? What is it composed of?
18. What are the basic functions of the heart?
19. How does the heart work?
20. What factors can affect the heart rate?
21. What is Andreas Vesalius? What can you say about A. Vesalius?
22. What is the most famous book written by A. Vesalius? What did he describe in it?
23. What did A. Vesalius determine and establish?
24. What did his discovery open the way to?
25. What is a microorganism? What microorganisms do you know?
26. Where can we find microbes?
27. How can diseases spread to humans? What makes people ill?
28. What are the ways to protect oneself from germs?
29. What were the conditions in hospitals in the 19th century?
30. What helped Joseph Lister to make his discovery?
31. What is J. Lister famous for? How did he prevent the inflammation of wounds?
32. What aseptic measures are taken in modern medicine?
33. Who is Edward Jenner? Why was Jenner's discovery so important?
34. How did Jenner come to the idea of vaccination?
35. How did E. Jenner carry out his 1st experiment and what did he call his new method?
36. What were the results of vaccination?