

Документ подписан простой электронной подписью

Информация о владельце:

ФИО: Емельянов Сергей Геннадьевич

Должность: ректор

Дата подписания: 26.05.2022 12:09:46

Уникальный программный ключ:

9ba7d3e34c012eba476ffd2d064ef2781953be730df2374d16f3c0ce536f0fc6

## **МИНОБРНАУКИ РОССИИ**

**Федеральное государственное бюджетное  
образовательное учреждение высшего образования  
«Юго-Западный государственный университет»  
(ЮЗГУ)**

**Кафедра иностранных языков**



### **АНГЛИЙСКИЙ ЯЗЫК ДЛЯ БАКАЛАВРОВ: ЗАДАНИЯ ДЛЯ АУДИТОРНОЙ И ВНЕАУДИТОРНОЙ РАБОТЫ (ЧАСТЬ I)**

**Методические указания по английскому языку  
для студентов 1 курса всех направлений подготовки**

**Курск 2016**

УДК 811.111 (071.8)

Составитель: В.Ю. Андреева

Рецензенты:

Канд. социологических наук, доцент *Л.В. Левина*

Английский язык для бакалавров: задания для аудиторной и внеаудиторной работы (часть I): методические указания по английскому языку / Юго-Зап. гос. ун-т; сост.: В.Ю. Андреева; Курск, 2016. – 57 с.

Цель методических указаний сформировать у студентов первого курса базовый тезаурус и подготовить студентов к чтению специальной научно-технической литературы для извлечения информации, а также привить им навыки устной речи по специальной и неспециальной тематике. Методические указания основаны на оригинальных материалах, задания ориентированы на активное обучение английскому языку и формирование основных понятий в рамках технических и гуманитарных специальностей.

Методические указания соответствуют требованиям программы дисциплины «Иностранный язык» федерального компонента цикла общегуманитарных и социально-экономических дисциплин в ФГОС ВО.

Методические указания предназначены для студентов очного и заочного отделения первого курса всех направлений подготовки для практических занятий по дисциплине «Иностранный язык» (английский).

Текст печатается в авторской редакции

Подписано в печать . Формат 60x84 1/16. Бумага офсетная.  
Усл. печ. л. . Уч.-изд. л. . Тираж экз. Заказ . Бесплатно.  
Юго-Западный государственный университет.  
305040, г. Курск, ул. 50 лет Октября, 94.

**Module 1**  
**Времена группы Simple (Indefinite)**

	<b>Present Simple</b>	<b>Past Simple</b>	<b>Future Simple</b>
Утвердительная форма	I (we, you, they) <b>examine</b> He (she,it) <b>examines</b>	I (he, she, it, you, we, they) <b>examined</b>	I (he, she, it, you, we, they) <b>will examine</b>
Отрицательная форма	I (we, you, they) <b>do not examine</b> He (she,it) <b>does not examine</b>	I (he, she, it, you, we, they) <b>did not examine</b>	I (he, she, it, you, we, they) <b>will not examine</b>
Вопросительная форма	<b>Do I (we, you, they) examine?</b> <b>Does he (she,it) examine?</b>	<b>Did I (he, she, it, you, we, they) examine?</b>	<b>Will I (he, she, it, you, we, they) examine?</b>

**Глагол «to be»**

<b>Present Simple</b>	<b>Past Simple</b>	<b>Future Simple</b>
<b>I am</b> we	<b>I (he,she, it) was</b>	<b>I (he, she, it, you, we, they)</b>
<b>are</b>	<b>we (you, they) were</b>	<b>will be</b>
<b>you are</b> you		
<b>are</b>		
<b>he (she, it) is</b> they		
<b>are</b>		

**Упражнение 1.** Поставьте следующие предложения в Past Simple или Future Simple, добавляя, где необходимо, слова *last/next week, last/next year, tomorrow, yesterday* и т.д.

1. I am very busy today. 2. They are in the reading-room now. 3. It is a cold day today. 4. We are students of one of the Moscow Institutes. 5. You are late for the lecture. 6. Mary is a good student. 7. Students have four exams in January. 8. Today they have time to go to the cinema. 9. We have some English magazines. 10. The book has many diagrams. 11. I have good news. 12. She has a map of England.

**Упражнение 2.** Поставьте следующие предложения в Past и Future Simple, добавляя слова *yesterday*, *tomorrow* и т.д.

1. There is a large reading-room in our university. 2. There are thirty students in our group. 3. There is a new film in our club today. 4. There is one telephone in our office. 5. There are many students at the lecture.

**Упражнение 3.** Поставьте следующие предложения в Past или Future Simple, добавляя слова *last/next year*, *yesterday*, *tomorrow*, *last/next week*, *last/next summer* и т. д.

1. We study six days a week. 2. I go to the institute every day. 3. My friend lives in a hostel. 4. Usually I get up at 7 o'clock. 5. My studies begin at half past eight. 6. We have four lectures every day. 7. After lectures we go to the dinning room. 8. We do our homework for the next day. 9. At night I read and watch TV. 10. On Sunday I visit my friends.

**Упражнение 4.** Поставьте сказуемое в отрицательной форме.

1. Today our lectures begin at 10 o'clock in the morning. 2. We were school-children last year. 3. We had four entrance exams in summer. 4. Yesterday the first-year students saw the institute laboratories. 5. We took all the necessary books from the library. 6. I got excellent marks for my entrance exams. 7. He knows the meaning of the word «engineering» (техника, машиностроение, инженерное дело). 8. The students of our group will meet in the laboratory. 9. The librarian gave us all the necessary books.

**Упражнение 5.**

**А.** Раскройте скобки, поставив общие вопросы.

1. (You do) ... anything interesting last weekend? 2. (He works) ...at the institute every day? 3. (They will come) ... to see you soon? 4. (We studied) ... at school last year? 5. (She will go) ... to the theatre next week? 6. (The students worked) ... in the laboratory yesterday? 7. (Ann gets up) ... at 7 o'clock? 8. (There are) ... many laboratories at our institute? 9. (There were) ... many students at the lecture? 10. (There will be) ... a library in the new building? 11. (We have)... two lectures today? 12. (The book has) ... many diagrams? 13. (You had) ... four exams last semester?

**В. Вставьте соответствующие вопросительные слова.**

1. ... is your name? 2. ... doesn't understand this grammar rule? 3. ... of you studies French? 4. ... is the answer to my question? 5. ... do you live in Moscow? 6. ... were you born? 7. ... lectures you on mathematics? 8. ... do you study? 9. Here are the books. ... is yours? 10. ... knows the answer to this question?

**Упражнение 6.** Поставьте вопросы к каждому члену предложения и дайте отрицательную форму.

1. He entered the Aviation Institute last year. 2. My sister studies at the university. 3. The third-year students will have industrial training next summer.

**Упражнение 7.** Прочитайте и переведите текст.

### My University

There are many universities in Moscow. The head of a university is Rector. Usually there are several faculties in a university. Each faculty has a number of specialized departments and is headed by dean. The course of studies lasts (продолжается) 5—6 years.

The academic year in this country's higher schools begins on the 1-st of September and is divided into two terms (semesters). Students take exams at the end of each semester. If the results of the examinations are good, students get grants. Twice a year students have vacations — two weeks in winter and two months in summer.

My University has several buildings, old and new ones. There are many various laboratories. There is a very good library and a computer center in the main building.

Every faculty has its own specialized library, laboratories, workshops and computer centers.

The first- and second-year students study general engineering subjects (общетехнические предметы). In the third year students begin to study specialized subjects.

A very good tradition of our University is that theory is accompanied by practical training. Students begin to work at the University's well-equipped (хорошо оборудованный) laboratories and in senior years at

various plants, design offices and research institutes of this country.

It is interesting but difficult to study at our University, especially for the first-year students as they do not know yet how to organize their work and time.

**Упражнение 8.** Переведите предложения, поставьте их в вопросительной и, где возможно, в отрицательной форме.

1. The books are taken from the library. 2. He was asked to help one of our students. 3. Many newspapers and magazines are published in this country. 4. That problem was discussed at our meeting. 5. The diagrams were brought by our monitor. 6. The exams will be taken in January. 7. They were told to do their work quickly. 8. The study of theory is accompanied by practical training. 9. A new laboratory was opened last year. 10. We shall be given a new task tomorrow. 11. Every institute is headed by Rector. 12. In summer you will be sent to a big plant for your industrial training.

1. This work must be done quickly. 2. Many complex problems can be solved with the help of computers. 3. Lomonosov may be called the founder of higher education in Russia. 4. Books on this subject can be found in every library. 5. Many basic subjects must be studied by the first and second-year students.

## СЛОВООБРАЗОВАНИЕ

**Упражнение 9.** Переведите следующие производные слова:

<p><i>глагол + tion = существительное</i></p>	<p>to examine – проверять, экзаменовать → examination – экзамен to apply – применять, использовать → application – применение, использование to educate – education; to adopt – adoption; to graduate – graduation; to specialize – specialization; to organize – organization;</p>
---	---

<i>существительное + al = прилагательное</i>	education – образование → educational – образовательный industry – industrial; profession – professional; person – personal;
<i>существительное + ic = прилагательное</i>	science – наука → scientific – научный; basis – основа → basic – основной
<i>прилагательное + ly = наречие</i>	high – высокий → highly – высоко; quick – quickly; usual – usually.

## СЛОВА И СЛОВСОЧЕТАНИЯ ДЛЯ ЗАПОМИНАНИЯ

**as** *conj* — как; по мере того как, когда; так как, поскольку

**as well** — так же

**affect** *v* — влиять, воздействовать на

**become** *v* — становиться

**consider** *v* — считать, рассматривать, учитывать

**develop** *v* — развивать, разрабатывать; преобразовать

**development** *n* — развитие, разработка

**enable** *v* — давать возможность

**ensure** *v* — обеспечивать, гарантировать

**especially** *adv* — особенно

**further** *a* — дальнейший

**improve** *v* — улучшать, совершенствовать

**mean** (*meant*) *v* — значить, означать

**means** *n* — средство, способ

**number** *n* — число, количество

**a number of** — ряд, несколько

**prepare** *v* — готовить, подготавливать

**provide** *v* — снабжать, обеспечивать

**receive** *v* — получать

**remain** *v* — оставаться

**quality** *n* — качество

**thorough** *a* — основательный, доскональный, тщательный

**usually** *adv* — обычно

**to play a part** — играть роль

**to take into consideration** — принимать во внимание, в расчет

**at present** — в настоящее время

### Text 1A

Прочитайте и переведите текст.

#### Higher Education in Russia

Higher education plays an important part in the life of any country as it provides the country with highly-qualified specialists for future development and progress. It trains people to become teachers, engineers, doctors and other professional workers.

In all the industrial countries standards of living are steadily changing; this means that the kind of education, which was good enough thirty years ago, is not necessarily good for them today. The serious need to find ways and means of ensuring continuous and thorough adoption of the universities to contemporary needs in our rapidly changing world is widely recognized. And this means that styles of teaching, quality of learning materials<sup>1</sup> and organization of the university itself have to be continuously brought up to date<sup>2</sup> and improved.

Besides, knowledge and information which comes through the mass media must also be taken into consideration. This information explosion<sup>3</sup> has affected every field of Study, especially, of course, in the natural and applied sciences and in all other sciences as well. The increase of information requires new methods and new approaches to students' training and instruction<sup>4</sup>.

At present a new system of education is introduced in this country — a distance education system. This computer system of learning helps working professionals to continue their education while remaining at their jobs. This system enables people to get knowledge and a good foundation in the sciences basic to his or her field of study. Distance learning has developed over years<sup>5</sup> from satellite video courses to modern videoconferencing through personal computers.

The academic year usually lasts 9 months and is divided into two terms (semesters). The first- and second-year students obtain thorough



instructions in the fundamental sciences of mathematics, physics, chemistry and drawing as well as computer engineering and a number of others. The curricula are enriched and broadened<sup>6</sup> by instructions in such subjects as foreign languages, history and economics.

At the third year students get more advanced knowledge and begin to concentrate on their special interests, so to say, their «major» subject and take many courses in this subject. Specialized study and courses will help students to become specialists and prepare them for their future work.

After four years students will get a bachelor's degree. Then the students may go on with their studies and in a year or two of further study and research get a master's degree. After graduating from the university they may go on with their study and research and may get a still higher degree.

About 75 percent of students receive state grants and 15 percent are sponsored by enterprises. Universities have their own students' hostels and some of them have large and excellent sport centers.

Education is a process through which culture is preserved, knowledge and skills are developed, values are formed, and information is exchanged.

Education is the way to success.

#### Notes to the Text

1. learning materials — учебный материал
2. to bring up to date — довести до современных требований
3. information explosion — информационный взрыв
4. training and instruction — подготовка и обучение
5. over years — за многие годы
6. curricula are enriched and broadened — программы (курсы обучения) обогащаются и расширяются

#### УПРАЖНЕНИЯ

**Упражнение 12.** Просмотрите упражнение 7 и текст 1А, ответьте на вопросы.

1. When does the academic year begin in this country?
2. How many exams did you pass to enter the University?
3. Do you pay for your education?
4. Do students get grants?
5. What subjects do students study in the first year?
6. Which subject is the most interesting for you?

7. Is there a sport center in your University? 8. What degree do students get after four years of study? 9. What degree can a student get after two years of further study and research? 10. What new education system is introduced in this country? 11. What specialities do people get after graduating from a university? 12. Why is higher education important in the life of every country?

**Упражнение 13.** Сравните предложения в действительном и страдательном залоге, переведите их.

1. Students asked the lecturer many questions. The lecturer was asked many questions. 2. The monitor told the first-year students to come to the laboratory. The first-year students were told to come to the laboratory. 3. Usually a lab assistant shows the equipment to the students. Usually the equipment is shown to the students by a lab assistant. 4. Students watched the process with great attention. The process was watched with great attention. 5. Tomorrow our teacher will give us a new task. A new task will be given tomorrow. We shall be given a new task tomorrow. 6. Practice accompanies theory. Theory is accompanied by practice. 7. He asked me to bring a dictionary. He was asked to bring a dictionary. 8. The teacher told the students to sign their drawings. The students were told to sign their drawings. 9. The dean will send the students to a big plant in summer. The students will be sent to a big plant in summer. 10. He taught us to use the lab equipment. We were taught to use the lab equipment.

**Упражнение 14.**

А. Переделайте предложения из действительного в страдательный залог.

1. You open the door. 2. We asked questions. 3. He will finish his project next week. 4. He can do this exercise. 5. They invited me to their conference. 6. I saw a new film. 7. My sister writes letters regularly. 8. Universities develop new methods of students' training. 9. After graduating from the University the students may get a still higher degree. 10. The study of foreign languages, history and economics must improve the curricula of technological universities.

В. Переведите предложения в страдательном залоге, дайте варианты, где возможно.

1. Mathematics, strength of materials, mechanics, elements of machines as well as engineering physics are studied at technological institutes. 2. The development of science is closely connected with the development of higher education. 3. Students are provided with hostels, well-equipped laboratories and libraries. 4. Any country must be provided with good specialists in all branches of science and technology for its further development. 5. Large sums of money are spent by the state to train highly-qualified engineers. 6. Much attention must be paid to improve the standards of higher education. 7. Students of technological institutes are trained to analyse various facts and theories. 8. The scientific and technological progress of a country is determined by the qualification of specialists. 9. Some institutes of technology are reorganized into universities. 10. The country must be provided with specialists capable of working with the technology of tomorrow effectively.

**Упражнение 15.** Найдите Participle I и Participle II, переведите предложения.

1. The students studying at the institutes passed entrance exams in summer. 2. The subjects studied in the first two years are very important for future engineers. 3. The lecture delivered by our dean was on new methods of technology. 4. The man delivering this lecture is our professor on mathematics. 5. An article discussing the new system of school education appeared in all newspapers. 6. The results of the experiments discussed yesterday will be published. 7. The attention paid to the study of fundamental subjects is great. 8. Students interested in computer engineering enter technological institutes. 9. The number of specialists connected with new branches of science and engineering is increased every year.

## УПРАЖНЕНИЯ ДЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ

**Упражнение 16.** Определите по суффиксу, к какой части речи относятся следующие слова:

administration, gradual, electric, intensively, practical, dramatic,

integral, specific, operation, illumination, naturally, identical, organization, originally, arctic, technical, acceleration.

**Упражнение 17.** Найдите в тексте 1А слова с суффиксами *-tion*, *-al*, *-ic*, *-ly* и переведите их.

**Упражнение 18.** Найдите:

а) антонимы (слова, противоположные по значению)

to begin, to enter, young, large, to open, to take, quick, much, to graduate from, many, long, slow, little, to finish, old, small, to close, to give, few, short;

б) синонимы (слова, совпадающие по значению)

new, large, many, to begin, to take, to speak, to enter, to build, to do, to get, modern, big, to start, much, to make, main, to talk, to construct, to come into, major.

**Упражнение 19.** Составьте предложения из следующих слов в соответствии с порядком слов в английском предложении.

1. has, buildings, our, several, institute. 2. subjects, students, many, the first-year, study. 3. the third-year, had, last, students, training, industrial, summer. 4. carry out, students, practical, work, in, laboratories, well-equipped. 5. problems, many, scientists, important, solve, our. 6. texts, difficult, Petrov, technical, translated. 7. his, will, the teacher, translation, correct. 8. next, dean, a lecture, deliver, our, week, will. 9. students, more, institutes, last, entered, a million, than, year.

**Упражнение 20.** Заполните пропуски глаголами *to be*, *to have* в соответствующем времени.

1. Moscow ... the capital of Russia. 2. There ... many institutes in Moscow. 3. The oldest of them ... Moscow University. 4. Our University ... one of the oldest technological institutes in this country. 5. It... founded in 1830. 6. It... old and new buildings. 7. There ... laboratories, workshops and libraries in our institute. 8. Every faculty ... its own computer center. 9. Our library ... a great number of books and magazines in all branches of science and technology. 10. Last year we ... at school, next year we ... the second year students. 11. We ... industrial

training in the third year.

**Упражнение 21.** Выберите правильную форму.

1. Entrance exams (held, are held) in summer. 2. More than 20 new technological institutes (were founded, founded) in the last decade. 3. Basic engineering subjects (studied, are studied) in the first and second years. 4. Highly-qualified specialists (trained, are trained) at higher schools. 5. More than a million students (enroled, were enroled) to the institutes and universities of this country last summer. 6. The training of specialists (will be improved, will improve) as a result of restructuring in the next few years.

**Упражнение 22.** Напишите ответы на вопросы по следующему образцу:

*Are there two presidents in the United States? No, there are not. There are not two presidents in the United States. There is one president in the United States.*

1. Are there thirteen months in a year? 2. Are there eight days in a week? 3. Are there fifty minutes in a hour? 4. Are there seventy seconds in a minute? 5. Are there forty days in a month? 6. Are there thirty days in February? 7. Are there thirty-two days in January? 8. Are there five seasons in a year?

**Упражнение 23.** Выберите соответствующие местоимения.

A. 1. (We, us) all went with (their, them) to the dean's office. 2. My friend came to see (I, me) last night. 3. Victor gave Peter and (I, me) a book and we went to the reading-room with (he, him) and his friend. 4. He told Mary and (me, I) to go with (he, him) and his sister. 5. They know all about my friend and (I, me). 6. I came to the Institute with Michael and (her, she). 7. An old man asked (we, us) to come and see (him, his). 8. Go with David and (her, she) to visit (they, them).

B. They invited me to (them, their) party. 2. He could not answer (his, her) teacher. 3. They were (your, you) former students. 4. You are (us, our) colleagues. 5. This is (my, me) brother. 6. Ann went to (his, her) room and put on (his, her) new dress because she was going to a dance given by (his, her) company. 7. Where is the

dictionary? (He, it) is in (his, its) place on the table.

C. 1. Your dictionary is new, but (my, mine) is not. 2. She says that this dictionary is (her, hers). 3. You can do it without my help, but not without (theirs, their). 4. Will you help me to sort out the things? I cannot tell which are (your, yours) and which are (our, ours). 5. He is an old friend of (me, mine). 6. Do you know your lesson today? He does not know (him, his). 7. This is your note book and this is his, but where is (her, hers)?

**Упражнение 24.** Выразите согласие или несогласие.

1. Do you study at school? 2. Are you a student of the third year? 3. Do you study many subjects? 4. Did you pass your entrance exams well? 5. Do you live in Moscow? 6. Do you live far from the institute? 7. Is English your favourite subject? 8. Will you go to the concert tomorrow? 9. Were your books taken from the library? 10. Do you live in the hostel?

**Упражнение 25.** Прочитайте и переведите текст без словаря.

As you know higher education trains highly-qualified specialists for further development and progress of the country. The students making good progress get state grants. The course of study at the universities lasts about six years. The students take three or four years of general engineering and fundamental courses, then one or two years of specialized training in some fields of science and technology. In the first and second years a good foundation for professional knowledge is provided. At present there are many modern laboratories at institutes. Most higher schools have their own computer centers. This means that the state must spend a lot of money to improve higher education.

## CONVERSATION

**Exercise 1.** Answer the questions.

1. How old are you now? 2. Where were you born? 3. What city did you come from? 4. Where did you go to school? 5. What foreign language did you study at school? 6. How long did you study at school? 7. Why did you enter this institute? 8. What are your favourite subjects

at the institute? 9. Where do you live? 10. Do you live with your family? 11. How do you usually spend your Saturday and Sunday? 12. What did you do last weekend? 13. What are you going to do next weekend? 14. What is your favourite sport? 15. What is your hobby? 16. Where do you usually spend your summer vacation? 17. When do you usually get up in the morning? 18. At what time do you usually leave home? 19. How do you usually get to the institute?

**Exercise 2.** Speak about:

1. My University.
2. Academic Year at My University.
3. I am a first-year student.

## SUPPLEMENTARY READING

### Text IB

Прочитайте текст. Расскажите об особенностях обучения в Кембриджском университете.

### Cambridge

Cambridge is one of the two main universities of England which is located at the Cam River. It was founded at the beginning of the 12th century. The University consists of (состоит из) 24 different colleges including 4 colleges for women. Each college is self-governing (самоуправляется).

The head of the University is the chancellor who is elected for life. The teachers are commonly called «dons» and «tutors». Part of the teaching is by means of lectures organized by the University. Besides lectures teaching is carried out by tutorial system for which Cambridge University is famous all over the world. This is a system of individual tuition (обучения) organized by the colleges.

Each student has a tutor who practically guides him through the whole course of studies. The tutor plans the student's work and once a week the student goes to his tutor to discuss his work with him. The training course lasts 4 years. The academic year is divided into 3 terms. The students study natural and technical sciences, law, history, languages, geography and many other subjects.

After three years of study a student may proceed (получить ученую

степень) to a Bachelor's degree, and later to the degrees of Master and Doctor. Students are required to wear gowns (мантия) at lectures, in the University library, in the street in the evening, for dinners in the colleges and for official visits. All the students must pay for their education, examinations, books, laboratories, university hostel, the use of libraries, etc. Very few students get grants. Not many children from the working class families are able to get higher education, as the cost is high. The cost of education depends on the college and speciality.

A number of great men, well-known scientists and writers studied at Cambridge. Among them are: Erasmus, the great Dutch scholar, Bacon, the philosopher, Milton and Byron, the poets, Cromwell, the soldier, Newton and Darwin, the scientists.

### Text 1C

Прочитайте текст. Расскажите об особенностях системы высшего образования в нашей стране и в США.

#### **Higher Education in the USA**

There is no national system of higher education in the United States. Higher education is given in colleges and universities. There are over 2100 various higher educational institutions, including colleges, technological institutes and universities. The average college course of study is 4 years. The academic year is usually 9 months or 2 terms (semesters) of four and a half months each. Classes usually begin in September and end in June. The first-year students are called freshmen.

Students choose a major subject (профилирующий предмет, дисциплина) and take many courses in this subject. After four years, they get a traditional Bachelor's degree. Then the students may go on to graduate school (старшие курсы) and with a year or two of further study get a Master's degree.

After another year or two of study and research, they may get a still higher degree as Doctor of Philosophy (Ph. D.). The student's progress is evaluated by means of tests, term works and final examinations in each course. The student's work is given a mark, usually on a five point scale (5-балльная система). Letters indicate the level of achievement. «A» is the highest mark. «F» denotes a failure.

Most American colleges and universities charge for tuition. The methods of instruction in the universities are lectures, discussions, laboratory and course works and seminars.



Most cities have colleges or universities that hold classes at night as well as in daytime. In this way people may work for a degree or just take a course in the subject that interests them.

### Text ID

Прочитайте письмо и напишите ответ.

### A Letter

Dear Sergei,

How are you? I have received your letter of 10-th June for which I thank you very much. I am sorry I haven't written to you sooner, but I have had many things to do. You know it was a very hard year for me. I spent my time getting ready for my exams and I was doing well in many subjects. After passing the exams I was enrolled into the University. The whole course of study is four years. My major subject is mathematics. It is my favourite and my hobby. I am good at it and do maths whenever I have a chance. I take many courses in this subject. I like to take part in mathematical competitions organized at our department and at the University. I think that mathematics is «the language of science» and plays an important part in many sciences. We are lucky to have a brilliant lecturer in mathematics this term. He has a talent to take a difficult subject and make it simple. You leave the lecture hall with a feeling that mathematics is the most interesting subject under the sun. Next term I'll do research in the field of computer engineering.

And how do you feel about maths? Please, write to me, I am especially interested in your life in students' hostel.

Good-bye for the present, your  
friend Mike

## ДОПОЛНИТЕЛЬНЫЕ ЗАДАНИЯ

**Упражнение 1. А.** Прочитайте текст и постарайтесь догадаться о значении выделенных слов.

Computers are now **essential** in many **areas of life** — modern banking, information technology and many others. However, this is not true for education.

There are some subjects which may be better taught using computers. Elementary mathematics, elementary language learning, any subject that

requires a student to **memorize** basic facts through repetition (повторение) is good to computer learning. The computer can be programmed to provide an endless number of simple questions, and as the student answers these questions the facts are learned.

However, in the learning and practice of more complex ideas, the computer is not **adequate**. A computer can evaluate (оценить) an answer as right or wrong, but it cannot determine why. It cannot find out why a student is making mistakes, and then explain important **concepts** in a different way so the student will understand. Task connected with explanation cannot be taught by computers as there are too many **variables** for a computer to deal with successfully.

Thus, while computers may be useful for practising simple skills, they are not an essential feature of modern education. Until further developments in computers are made, the human teacher will remain **indispensable**.

В. Подберите к каждому слову или словосочетанию в колонке А соответствующее из колонки В.

А	В
1. essential	a. thing that can vary
2. area of life	b. idea, opinion
3. memorize	c. absolutely necessary
4. adequate	d. most important
5. concept	e. sphere of activity
6. variable	f. learn by heart
7. indispensable	g. satisfactory, sufficient

**Упражнение 2.** Составьте возможные словосочетания глаголов из колонки А с существительными из колонки В.

А	В
1. go to/enter/be enrolled into/graduate from	a. progress
2. read for/take/pass	b. a course in, notes
3. do/study	c. good at Maths
4. take/make	d. research into/on
5. get/receive	e. university

6. make	f. a subject, a course, for a degree
7. be	g. in discussion, competition on
8. take part	h. grant, degree
9. do/conduct/carry out	i. examinations (exams)
10. give/do	j. a lecture

**Упражнение 3.** Замените в каждом предложении выделенный глагол на другой глагол с тем же значением.

1. Did you **receive** a grant? 2. How many exams did you pass before you **entered** university? 3. Do you **take** notes in lectures? 4. Who **gives** the lecture in history? 5. My friend **studies** physics. 6. What research did you **conduct** last semester?

**Упражнение 4.** Заполните таблицы на словообразование.

Verb	Noun
Instruct •••	••• foundation
Inform •••	••• determination
Consider •••	••• preparation
Introduce	•••

Verb	Noun	Adjective
Educate	•••	•••
Occupy	•••	•••
Base	•••	•••

## Module 2

### Времена группы Continuous

	<b>Present Continuous</b>	<b>Past Continuous</b>	<b>Future Continuous</b>
Утвердительная форма	am is examining are	was were examining	will be examining
Отрицательная форма	am is <b>not</b> examining are	was were <b>not</b> examining	will <b>not</b> be examining

**Упражнение 1.** Объясните употребление времен группы Continuous, переведите предложения.

A. 1. I am at my English lesson. I am sitting and doing my exercises. My friend is not sitting, he is standing at the blackboard and looking at me. 2. It is getting cold now, isn't it? Look out. Is it raining now? 3. You are late. What were you doing? — I was translating a text. 4. When I came home my parents were having supper and at the same time they were watching TV. 5. What was he doing when I rang up an hour ago? He was looking through a newspaper when I rang up. 6. Tomorrow we shall be preparing for a test for the whole evening. 7. In July they will be taking their exams for the whole month. 8. What will you be doing tonight at 10 o'clock? Will you be working? No, I shall be reading a book at this hour.

B. 1. New Metro lines are being built now in Moscow. 2. What is going on? A new film is being discussed. 3. What grammar was being explained when you came in? 4. What questions were being discussed at that time? 5. New methods of research are being used in our lab. 6. Much is being done to improve laboratory methods.

**Упражнение 2.** Выберите правильную форму глагола.

1. We (are translating, translate) a technical text now. 2. We usually (are not translating, do not translate) stories. 3. She (does not look, is not looking) through all the newspapers every evening. 4. He (looked, was

looking) through a newspaper when the telephone rang. 5. What (were, was) you doing a minute ago? I (was watching, watched) television. 6. I (watch, am watching) television every day. 7. Last night, I (worked, was working) until midnight. 8. Yesterday he (worked, was working) a lot. 9. The students (had, were having) an interesting discussion when the teacher came in. 10. The students often (have, are having) interesting discussions after lectures. 11. When he comes they (will be taking, will take) a test. 12. They (will be taking, will take) a test next week. 13. Where is Ann? She is in the coffee shop. She (has, is having) a cup of coffee. She always (has, is having) a cup of coffee in the evening.

**Упражнение 3.** Поставьте глагол в соответствующем времени в зависимости от обстоятельства.

This student (study) physics (at present, every day, last semester, when the telephone rang, tomorrow at this time, next semester).

**Упражнение 4.** Переведите предложения.

1. Сейчас у нас урок английского языка. Преподаватель стоит у доски и объясняет новую грамматику. Студенты внимательно слушают и записывают. 2. Где вы были вчера после обеда? Я был дома весь день. Я писал письмо друзьям. 3. Что ты делал пять минут назад? 4. На нашей улице произошел несчастный случай (accident). Я смотрел в окно, когда он произошел. 5. Что будет делать твоя сестра в 8 часов вечера? Она будет выполнять домашнее задание. 6. Какие вопросы будут обсуждаться сегодня на собрании? — Приходите в 12 часов. Будет обсуждаться очень интересный вопрос. 7. Когда мы приехали в город, там строился новый спортклуб.

### Функции и перевод «it»

В предложении **it** может употребляться:

1) как личное местоимение в функциях подлежащего (именительный падеж) и дополнения (объектный падеж); переводится словами **он, она** или **его, ее**:

Take this book. Возьми эту книгу.

It is interesting. **Она** интересная.

Read **it**. Прочти **ее**.

We shall speak about **it** next Мы поговорим о ней в следующий раз.

2) как указательное местоимение (переводится словом **это**):

What is **it**? It is our new labora- Что это? Это наша новая лаборатория.

3) как формальное (вводящее) подлежащее в выражениях типа

[t is cold. Холодно.

[t is getting dark. Темнеет.

It is winter. Зима

[t is necessary to... Необходимо...

[t seems... Кажется...

It is known that... Известно, что...

В этих предложениях **it** не переводится.

4) в составе усилительной конструкции **it is ...that** (**it** не переводится):

It is this book **that** I want to Именно эту книгу я хочу прочитать.

5) как формальное дополнение в выражениях типа **make it possible** *делать возможным*; **make it difficult** *затруднять*; **find it useful** *считать (находить) полезным* (здесь **it** также не переводится).

**Упражнение 5.** Переведите предложения с *it* в различных функциях.

1. It is autumn. It is the 3rd of October. It is dark in the morning and it is difficult to get up. 2. It is a new subject. It is very important for our future speciality. We shall study it for two years. It will be our future speciality, but we do not know much about it in the first year. 3. It is known that the knowledge of general engineering subjects is the basis for the study of special subjects. 4. It seems that he works a lot. 5. It is said that the chemistry laboratory of our institute is good. 6. The student finds it difficult to translate such a text without a dictionary. 7. It was not easy to study at the institute. 8. It is important to understand the fundamentals of this science. 9. It was A.S. Popov who invented the radio. 10. It is the

knowledge of general engineering subjects that is the basis of engineering training.

### Функции и перевод «one»

Слово **one** может быть:

1. Числительным. В этом случае **one** стоит перед существительным, является его определением и переводится словом один:

I have only **one** dictionary. У меня есть только **один** словарь.

2. Неопределенным местоимением. Тогда **one** употребляется в качестве подлежащего в неопределенно-личных предложениях и на русский язык не переводится:

**One can** read such a text without a dictionary. Можно читать такой текст без словаря.

3. Заменителем существительного. В этом случае **one** употребляется вместо ранее упомянутого существительного, что бы избежать его повторения. Перед словом-заменителем может стоять артикль и оно может употребляться в форме множественного числа (ones). Переводится **one** тем существительным, которое заменяет, или не переводится вообще, на пример:

You may take my dictionary (dictionaries). Вы можете взять мой словарь (словари).

Thank you, I have **one** (ones), **the one** that Peter gave me yesterday. Спасибо, у меня есть **словарь (словари)**, тот, который дал мне вчера Петя.

**Упражнение 6.** Переведите предложения с *one* в различных функциях.

1. One must study a lot to become an engineer. 2. We must write only one exercise now. 3. Engineer is one of the most important professions, it is the one that is taught at technical institutes. 4. One cannot translate such an article without a dictionary in the first year. 5. One must have a very good knowledge of general engineering subjects to become a good engineer. 6. One must pass all exams well to enter an institute. 7. Last summer I read many English articles, and my friend read some

German ones. 8. This summer we shall spend in the country, the last one we spent in the city.

9. We translated many texts, but there is one more text to translate.

10. One can take this journal from the library.

### Степени сравнения прилагательных и наречий (Comparison Degrees of Adjectives and Adverbs)

Прилагательные в английском языке имеют три степени сравнения: положительную, сравнительную и превосходную.

Сравнительная и превосходная степени образуются двумя способами:

1. Путем прибавления суффикса *-er* в сравнительной степени и суффикса *-est* в превосходной степени к основе односложного прилагательного или наречия:

Положительная степень	Сравнительная степень	Превосходная степень
fast <i>быстрый</i> , hot <i>горячий</i> , happy <i>счастливый</i> large <i>большой</i>	faster <i>более быстрый</i> , hotter <i>более горячий</i> , happier <i>счастливее</i> larger <i>больший</i>	fastest <i>самый быстрый</i> , hottest <i>самый горячий, горячее</i> happiest <i>самый счастливый</i> largest <i>самый большой</i>

Также сюда входят двусложные слова оканчивающиеся на *-ble*, *-er*, *-y*, *-some*, *-ow*:

Положительная степень	Сравнительная степень	Превосходная степень
noble	nobler	noblest
tender	tenderer	tenderest
happy	happier	happiest
narrow	narrower	narrowest



2. С помощью слов *more* в сравнительной степени и *most* в превосходной степени перед многосложными прилагательными и наречиями:

Положительная степень	Сравнительная степень	Превосходная степень
<i>difficult</i> <i>трудный</i>	<i>more difficult</i> <i>более трудный</i>	<i>most difficult</i> <i>самый трудный</i>

3.. Некоторые прилагательные образуют степени сравнения не по общему правилу:

Положительная степень	Сравнительная степень	Превосходная степень
<i>good</i>	<i>better</i>	<i>best</i>
<i>bad</i>	<i>worse</i>	<i>worst</i>
<i>little</i>	<i>less</i>	<i>least</i>
<i>many, much</i>	<i>more</i>	<i>most</i>
<i>far</i>	<i>farther/further</i>	<i>farthest</i> (о расстоянии), <i>furthest</i> (о времени и расстоянии) <i>самый далекий, дальнейший, дальше всего</i>
<i>old</i>	<i>older/elder</i>	<i>oldest</i> (возраст) <i>eldest</i> (старшинство в семье)
<i>near</i>	<i>nearer</i>	<i>nearest</i> (о расстоянии), <i>next</i> (о порядке следования) <i>ближайший, самый близкий, ближе всего</i>
<i>late</i>	<i>later</i>	<i>latest</i> (о времени), <i>last</i> (о порядке следования) <i>самый последний, поздний, позднее всего</i>

**Упражнение 7.** Дайте недостающие степени сравнения.

(the) biggest, longer, faster, (the) hardest, (the) heaviest, thinner, narrower, lower, (the) greatest, newer, colder, (the) hottest, (the) shortest, less, (the) worst, more.

**Упражнение 8.** Поставьте прилагательные в сравнительной или превосходной степени.

1. Moscow University is (large) University in Europe. 2. Strength of materials is (difficult) than chemistry. 3. Is it (interesting) to study at the institute than at school? 4. My friend works (hard) at his English than I. 5. My brother is (old) than I but he is (short). 6. The University is one of the (tall) buildings in Moscow. 7. Days in summer are (long) than in winter. 8. This group studies (good) than that one. 9. Oxford is (old) University in Britain.

**Упражнение 9.** Ответьте на следующие вопросы.

1. Which is the most difficult subject for you? 2. Which is the easiest subject? 3. Which of the subjects is more difficult: physics or mathematics? 4. Who is the tallest in your group? 5. Which is the most interesting subject for you? 6. Is English as difficult as mathematics?

**Упражнение 10.** Заполните пропуски словами *than, as ... as, not so ...as*.

1. In winter days are ... long ... in summer. 2. Chemistry is... difficult ... physics. 3. I study English ... long ... my friend. 4. My sister is older ... I. 5. English is ... so difficult... mathematics. 6. Moscow is bigger ... Tallinn. 7. This machine is ... old ... that one. 8. The new transistor is more powerful... the old one. 9. The task of school education is ... important... that of higher education. 10. John is ... tall ... his brother, but he is ... tall ... his father.

**Упражнение 11.** Переведите обороты в сравнительной степени согласно образцу:

*The longer the nights, the shorter the days.* Чем длиннее ночи, тем короче дни.

1. The harder we study, the more we know. 2. The more you work, the better you know English. 3. The more we study nature, the more we know

about it. 4. The nearer the earth is, the denser the atmosphere is. 5. The stronger the wind, the harder the conditions of work for weather observers. 6. The quicker we finish, the sooner we will go home.

## СЛОВООБРАЗОВАНИЕ

**Упражнение 12.** Переведите следующие производные слова согласно образцу:

<p><i>глагол + -ment</i> =существительное</p>	<p><i>to environ — окружать → environment — окружение</i> <i>to enrol — enrolment, to develop — development, to achieve — achievement, to move — movement;</i></p>
<p><i>прилагательное + -(i)ty =</i> <i>существительное</i></p>	<p><i>communal-общинный → community — общность, содружество</i> <i>social — общественный → society — общество</i> <i>active — activity, special — speciality, national — nationality, intensive — intensity, electric — electricity;</i></p>
<p><i>существительное + -ous =</i> <i>прилагательное</i></p>	<p><i>fame — слава, известность → famous — знаменитый, известный</i> <i>variety — various, number — numerous, monotony — monotonous;</i></p>
<p><i>префикс re- (повторность действия)</i></p>	<p><i>renew — обновлять, восстанавливать</i> <i>renewal — восстановление</i> <i>renewable — восстанавливаемый, восстанавливающийся</i> <i>rebuild, remake, reuse, reorganize, reorganization.</i></p>

## СЛОВА И СЛОВСОЧЕТАНИЯ ДЛЯ ЗАПОМИНАНИЯ

<b>achieve</b> <i>v</i> — достигать	<b>reach</b> <i>v</i> — достигать
<b>advance</b> <i>n</i> — продвижение вперед, успех, прогресс	<b>realize</b> <i>v</i> — понимать, отчетливо представлять
<b>area</b> <i>n</i> — область	<b>remain</b> <i>v</i> — оставаться
<b>bring about</b> <i>v</i> — вызывать	<b>scale</b> <i>n</i> — масштаб, размер
<b>carry out</b> <i>v</i> — проводить, вы- полнять	<b>several</b> <i>a</i> — несколько
<b>change</b> <i>v</i> — менять(ся);	<b>similar</b> <i>a</i> — подобный, схожий
<b>considerable</b> <i>a</i> — значительный	<b>solve</b> <i>v</i> — решать
<b>deal with</b> <i>v</i> — иметь дело с	<b>still</b> <i>adv</i> — все еще, однако
<b>effort</b> <i>n</i> — усилие	<b>success</b> <i>n</i> — успех
<b>evident</b> <i>a</i> — очевидный	<b>therefore</b> <i>adv</i> — поэтому
<b>growth</b> <i>n</i> — рост	<b>way</b> <i>n</i> — путь, дорога; способ
<b>however</b> <i>adv</i> — однако, тем не менее	<b>joint efforts</b> — совместные усилия
<b>increase</b> <i>v</i> — увеличиваться	<b>take measures</b> — принимать меры
<b>level</b> <i>n</i> — уровень	<b>throughout the world</b> — по всему миру
<b>purpose</b> <i>n</i> — цель, назначение	

## Текст 2А

Прочитайте текст и ответьте, какие меры необходимы для успешного решения проблемы защиты окружающей среды в глобальном масштабе. Переведите.

**Environment Protection Must Be Global**

That the problem of pollution and ecology has become the most important one for mankind is evident to all. The more civilization is developing, the greater the ecological problems are becoming. Air and water pollution by industry is now reaching tremendous proportions. In our era it is changing from a national to an international problem, especially in territories where rivers cross several countries. The seas and oceans are also becoming seriously polluted. A similar situation is developing in the atmosphere. It is known that many cities throughout the world suffer from air pollution.

However, our scientific knowledge and technological advancement make it possible to eliminate it if people use good will<sup>1</sup> and make considerable

investments for that purpose. The development of natural resources on a global scale is already possible from a scientific and technical standpoint<sup>2</sup>. Large-scale experimental work in this area is successfully being carried out.

At present scientists in industrially developed countries are working on the theory of interaction of all the atmospheric and oceanic global processes that determine the climate and weather of the world. Increasing growth of population, industrialization and the use of resources are slowly but surely changing the global climate and water balance. This can be described as a great experiment, one that may bring about changes in the environment more serious than ever before.

The essential feature in the environment protection is that many problems can be solved only on the level of world community<sup>3</sup>. Therefore, the planning of protection against pollution by human society as a whole<sup>4</sup> is imperative today and in the near future. It is necessary to develop an international program to study data on land, forest, atmospheric and oceanic resources, both renewable and non-renewable. It is the joint efforts of many scientists and special public organizations that can deal with the problem and take necessary measures to protect the environment.

It is still a big job and much remains to be done<sup>5</sup>. However, scientists are confident that planned actions of all countries can eliminate pollution and achieve successes in purifying air, water and soil and in safeguarding natural resources. At the same time one must realize that social and political circumstances may stand in the way of further progress in this field.

#### Notes to the Text

1. good will — добрая воля
2. standpoint — точка зрения
3. community — сообщество
4. as a whole — в целом
5. much remains to be done — еще многое предстоит (остается) сделать

#### УПРАЖНЕНИЯ

**Упражнение 13.** Просмотрите текст 2А и ответьте на вопросы.

1. What is this text about? 2. What is ecology? 3. How does water (air) become polluted? 4. Why is the problem of water pollution becoming a global problem?

**Упражнение 14.** Найдите предложения с глаголом-сказуемым в Present Continuous, переведите.

1. Water and air are becoming more and more polluted. 2. At present computers are more widely used in the sphere of education. 3. Where were you at six o'clock? We were studying in the reading-room. 4. There are government and public organizations that are analysing data on land, forest and air. 5. New courses of education such as management are being organized in many institutes. 6. What will you be doing in the laboratory tomorrow morning? We shall be watching the operation of a new device. 7. Measures are being taken to save Lake Baikal. 8. The situation at Lake Baikal is remaining very serious. 9. Much attention is being paid at present to the development of international scientific contacts. 10. Science is becoming a leading factor in the progress of mankind.

**Упражнение 15.** Найдите предложения, где *it* является формальным подлежащим, личным местоимением или входит в состав усилительной конструкции; переведите.

1. It is dark here. Please, turn on the light. 2. It was Gagarin who was the first man to orbit the Earth. 3. Our students study strength of materials. It is a very difficult subject. 4. Mathematics is studied at all technological institutes because every engineer must know it well. 5. It is the most interesting article on this subject. 6. It has become evident that ecological problems can be solved only on the global level. 7. Joint efforts of people throughout the world make it possible to achieve some progress in environment protection. 8. It is the development of robots that will solve some very complex problems of industry. 9. It is evident that research is becoming more specialized now. 10. The use of the new equipment made it possible to minimize the number of workers. 11. It is industrialization that is making ecological problems very serious.

**Упражнение 16.** Переведите предложения с союзами сравнения.

1. The bigger the cities are, the greater the pollution is. 2. The more computers and robots are used in industry, the quicker technological progress will be. 3. The more automobiles appear in the streets, the worse the air in the cities is. 4. The more effective is the technology, the quicker is the development of this country. 5. The quicker we joint our efforts in

protecting the environment, the quicker the ecological problems are solved.

## УПРАЖНЕНИЯ ДЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ

**Упражнение 17.** Определите по суффиксу, к какой части речи относятся слова.

radioactivity, measurement, interaction, society, nervous, elimination, basic, proportion, seriously, symbolic, anxious, ecological.

**Упражнение 18.** Назовите глаголы, образованные от следующих существительных, и переведите их.

advancement (продвижение вперед, прогресс), investment (капиталовложение), measurement (измерение), achievement (достижение), improvement (улучшение), fulfillment (выполнение).

**Упражнение 19.** Переведите слова с префиксом *re-*.

rename, reopen, renew, renewable, non-renewable, renewal.

**Упражнение 20.** Найдите среди следующих слов:

а) антонимы

slowly, old, at present, small, quickly, in the past, new, large;

б) синонимы

tremendous, epoch, realize, several, work, progress, great, field, era, understand, make it possible, different, achieve, some, advance, enable, area, various, reach, essential, job, important.

**Упражнение 21.** Составьте предложения, пользуясь словами и выражениями из таблицы.

Her friend	are watching	a letter
They	is writing	on the telephone
I	are listening to	the latest news on the radio
You	am reading	the TV programme
We	is speaking	an exercise

**Упражнение 22.** Придумайте предложения со следующими глаголами-сказуемыми:

is changing, was changing, will be changing, are becoming, will be developing, are being introduced, was being solved.

**Упражнение 23.** Раскройте скобки.

A. When Peter was a child, he had two drawing books. One of them was (large) than the other. His elder brother bought the (large) one for him. Peter liked it (well) because the drawings in it were (large) and simple. He drew something every day. Each new day his drawing was (good) than the one he had made the day before. The last page was much (good) than the first one.

B. After graduating from the institute Mike went to Siberia to a small industrial town. It was (difficult) for him to begin his work as an engineer than he thought that it would be. He moved to (important) city than the first one. He was not (successful) there than before, however, and sometimes he was even (unhappy). However, he was (happy) about one thing, he was becoming a (useful) specialist.

C. New York is the (large) city in the US. Perhaps, with all its suburbs (пригород), it is the (large) city in the world. It is one of the (important) industrial cities in the country. Some of the (old) and historic buildings are there. Some of the buildings in New York City are the (high) buildings in the whole world. New York City is not only the (large) city in the US; it is also the (important) industrial center. Perhaps, the (expensive) office buildings in the world are there. It has the (great) number of factories, the (large) banks and post offices. It sends out many letters and receives the (heavy) mail bags. It is truly the (important) business city.

**Упражнение 24.** Прочитайте текст и озаглавьте его.

The highest mountain in the world is Mount Everest — 29,002 feet high. The largest ocean is the Pacific having a total area of 63,986,000 square miles. The Atlantic Ocean, the next largest, is only 31,530,000 square miles, the Indian Ocean with 28,350,000 square miles comes third. The longest river is the Nile which is more than 4,000 miles longer or about twice the distance by air from London to Beirut. The biggest island is Greenland which belongs to Denmark and is about 840,000 square miles in extent. The largest lake is the Caspian Sea. Geographers consider it as a



lake because it is not connected with any of the great oceans. It has an area of about 170,000 square miles. Which is the deepest sea? So far, as we know at present the greatest depth is in the Pacific Ocean near the Philippines and goes down to 37,000 feet, which is much more than the height of Everest. The biggest volcano is in Ecuador, South America. It is still active and 19,612 feet high. There is another one between Argentina and Chile and it is more than 3,000 feet higher.

**Упражнение 25.** Прочитайте и переведите текст без словаря,

It is difficult for mankind to predict (предсказать) changes in the environment accurately. It is known that natural changes in weather and climate may have more catastrophic global effects than human activity. But scientists are developing a new concept that can help make such prediction more accurately. It is based on our understanding that the Earth is an integral system. Its parts — oceans, atmosphere, land or life — cannot be understood in isolation to predict changes in the most accurate way. Modern scientific and technological progress made it possible to use new technologies for that purpose. That satellites can control physical, chemical, biological and geological changes on a global scale is well-known now. One must also know that the study of environmental problems with the help of satellites is becoming international. Russia, the US, France, Japan, Canada, India, China and Italy are planning to send their satellites in both polar and geostationary orbits.

## CONVERSATION

**Exercise 1.** Answer the questions according to the example:

*What is one of the most important problems for mankind now? (the problem of pollution and ecology).*

*The problem of pollution and ecology is one of the most important problems for mankind now.*

1. What problem is becoming a global problem? (the problem of air and water pollution). 2. What makes it possible to eliminate air and water pollution? (scientific knowledge and technological advance, good will and large investments). 3. What are scientists in industrially developed countries currently working on? (the theory of interaction of the atmospheric and oceanic global processes). 4. What factors are

slowly changing the global climate and water balance? (the growth of population, industrialization and use of resources). 5. What actions are necessary to take to deal successfully with the problem of protecting the environment throughout the world? (planning, developing international programs to study ecological data, joint efforts of scientists and special public organizations).

**Exercise 2.** Make a sentence out of the two parts.

1. At present one of the most important problems for mankind	1. are becoming seriously polluted by industry.
2. The rivers, seas and oceans	2. are successfully being carried out on a global scale.
3. That purifying air, water and soil is changing from a national to a global problem	3. it is possible to eliminate air and water pollution by planned actions of human society as a whole.
4. Therefore, it is necessary	4. is evident to all.
5. Large-scale experiments in this area	5. to take measures to safeguard natural resources and the environment on a global scale.
6. Scientists expect that	6. is that air and water pollution is reaching very large proportions.

### Text 2B

Прочитайте текст. Укажите отрицательные стороны научно-технического прогресса. Приведите примеры экологической ситуации в Вашем городе.

### Pollution

The British, like many other Europeans, are becoming more and more worried (беспокоиться) about their environment. Here are some of the environmental problems that they face.

As the population of large cities like London, Birmingham and Manchester continues to grow, pollution problems become worse.

The air in many towns and cities is being polluted by traffic

(транспорт, движение) and industry. The number of cars and lorries is growing all the time. On the one hand, they bring mobility to millions of people, but on the other hand, they need bigger, better and more expensive roads, which often ruin the countryside (сельская местность). Traffic in cities is getting worse and worse. Water pollution has become a serious problem in many British rivers. People living near airports suffer from the noise of increasingly larger and more powerful jet airliners taking off and landing.

### Text 2C

Прочитайте текст. Расскажите по-английски о результатах исследования, проведенного Всемирной организацией здравоохранения.

### **Ecological Problems of Big Cities**

There are over 150 supercities in the world with population from one to 15 million and more. Tokyo, New York, London, Mexico City, Rio de Janeiro and Moscow are just a few of the cities which have become supercities.

People in the supercities suffer from polluted environment: bad water, bad air and noise. A new term, urban (городской) climate, is used now for such cities. It means high temperature, oppressive atmosphere and intensive smog.

Some experts consider that it is practically impossible to protect the big cities from pollution. The World Health Organization (WHO) studied air pollution around the world for over eight years. It measured two things: the level of sulphur dioxide ( $SO_2$ ) in the air and the level of smoke. Sulphur dioxide and smoke pollute water and have serious effect on forest, buildings and health of people.

In the WHO report it is shown that the cities with the most considerable level of  $CO_2$  in the air are Milan, Teheran, Prague, Santiago and Sao Paulo. However, some cities with clean air get worse in winter. Helsinki, for example, becomes one of the cities with the largest proportion of it in the air in winter. This must be connected with the heating of houses. One can also mention (упоминать) Glasgow and Warsaw which suffer in the same way.

## ДОПОЛНИТЕЛЬНЫЕ ЗАДАНИЯ

**Упражнение 1. А.** Прочитайте следующие словосочетания из текста 2А и постарайтесь догадаться о значении выделенных слов.

1. **to protect** the environment
2. become **seriously** polluted
3. **suffer** from pollution
4. **interaction** of all processes
5. the **essential** feature
6. protection is **imperative** today
7. **public** organizations
8. **safeguarding** natural resources

**В.** Подберите к каждому слову в колонке А соответствующее значение из колонки В.

А	В
1. protect	a. do not feel well
2. serious	b. for all people
3. suffer	c. keep safe from smth.
4. interaction	d. protection
5. essential	e. needing attention
6. imperative	f. important
7. public	g. necessary, most important, fundamental
8. safeguarding	h. action on each other

**Упражнение 2. А.** Прочитайте текст и постарайтесь догадаться о значении выделенных слов.

One of the most **urgent** environmental problems in the world today is the shortage of clean water. **Access** to clean drinking water is a basic human need. But industrial pollution has made many sources of water undrinkable. Rivers, lakes and even seas have become **poisonous**.

Lake Baikal is one of the world's largest and most beautiful lakes. Russians call it the Holy Sea. It contains a rich variety of animals and **plants**, including 1,300 **rare species** that do not exist anywhere else in the world. However, they are being destroyed by the massive industrial **effluent**, which some factories still **pour** into the lake every day.

A few years ago, people thought that the supply of clean water was

limitless. Now clean water is **scarce**, and we are beginning to **respect** this **precious** resource. We must protect the clean water that remains for the **sake** of our children and grandchildren.

В. Подберите к каждому слову в колонке А соответствующее из колонки В.

A	B
1. urgent	a. group, sort, kind of
2. access	b. in the interest of
3. poisonous	c unusual, not often seen
4. plant	d. of great value (price)
5. rare	e. needing action
6. species	f. not available, not equal to the demand
7. destroy	g. come freely, flow in a continuous stream
8. effluent	h. way (road) to, means of using
9. pour	i. think about, pay attention to
10. scarce	j. living organism the kind smaller than trees
11. respect	k. break, put an end to
12. precious	l. harmful, causing death
13. sake	m. waste from a factory

**Упражнение 3.** Заполните таблицы на словообразование.

Noun	Verb	Noun	Adjective
change	...	variety	...
...	achieve	ecology	...
...	advance	environment	...
development	...	danger	...
...	protect	industry	...
...	pollute	globe	...
action	...	nature	...
...	increase	...	safe
elimination	...	...	numerous
...	interact	ocean	...

**Упражнение 4.** Заполните пропуски словами *global, environmental, pollute, dangerous, scale, environment, protection, resources, increase*.

People are worried about the (1) ... (the air, water, and land around us) as a result of the (2)... effects of human activity. «Developments» that are making our life more comfortable such as industrialization, urbanization and the use of cars all (3) ... the earth's atmosphere. There are some of the (4) ... problems today: the ozone layer, (5) ... warming (an (6) ... in world temperature), the conservation and (7) ... of nature and natural (8) ... on a global (9) ...

**Упражнение 5.** Напишите сочинение-рассуждение на тему «What personally I can do to protect environment».

### Module 3

#### Времена группы Perfect

	<b>Present Perfect</b>	<b>Past Perfect</b>	<b>Future Perfect</b>
Утвердительная форма	I (we, you, they) <b>have written</b> He (she,it) <b>has written</b>	I (he, she, it, you, we, they) <b>had written</b>	I (he, she, it, you, we, they) <b>will have written</b>
Отрицательная форма	I (we, you, they) <b>haven't written</b> He (she,it) <b>hasn't written</b>	I (he, she, it, you, we, they) <b>hadn't written</b>	I (he, she, it, you, we, they) <b>will not have written</b>
Вопросительная форма	<b>Have</b> I (we, you, they) <b>written?</b> <b>Has</b> he (she,it) <b>written?</b>	<b>Had</b> I (he, she, it, you, we, they) <b>written?</b>	<b>Will</b> I (he, she, it, you, we, they) <b>have written?</b>

#### ПРЕДТЕКСТОВЫЕ УПРАЖНЕНИЯ

**Упражнение 1.** Объясните употребление времен группы Perfect, переведите.

1. This is a very good book, I have just read it with pleasure. 2. He has been absent this week. He has been ill. 3. I haven't seen you for a long time. Where have you been all this time? 4. We haven't heard about her since 1989. 5. By the beginning of the lecture the laboratory assistant had brought all the necessary diagrams. 6. Before we came to the next lecture we had studied the material of the first one. 7. Have you already finished your diploma work? No, I shall have finished it by the end of June. 8. They will not have passed their exams by the time you return. 9. Many students have been enrolled into universities this year. 10. The translation has not been finished yet. It will have been finished by the end of the month. 11. Have you brought these journals with you? No, these journals had been brought by my sister before I returned from St.Petersburg. Don't you know that?

**Упражнение 2. А.** Выберите правильную форму сказуемого.

1. He (has graduated, graduated) from MSTU named after Bauman

this year. He (graduated, will have graduated) from MSTU named after Bauman in 6 years. 2. She (saw, has seen) us in the morning yesterday. She (saw, has seen) us this morning. 3. I (have met, met) him last year. I never (had met, have met) him before. 4. Our group (will do, will have done) a lab work tomorrow. 5. This problem (is discussed, has been discussed) much in the press lately. This problem (was discussed, had been discussed) yesterday.

**В.** Переделайте предложения из действительного в страдательный залог.

1. The students have done their homework very well. 2. Bob has left his notebook at home. 3. I have told you about a lecture. 4. The laboratory assistant had prepared the experiment by 2 o'clock. 5. She had finished her test when we came. 6. The teacher will have corrected our dictation by the end of the week. 7. They have not made any mistakes.

**Упражнение 3.** Переведите предложения.

1. Что вы сделали сегодня? — Я напечатала (to type) много писем. — Я хочу посмотреть письмо к мистеру Д. — Вот, пожалуйста. Я только что напечатала его. — А письмо к мистеру Р.? — Я еще не напечатала это письмо. Я напечатаю его к концу рабочего дня. 2. Вчера мы встретили наших друзей. Мы не видели их с окончания университета. До возвращения в Москву они работали в Орле. 3. Новый завод будет построен к началу следующего года. Он будет оснащен самым современным оборудованием.

**Упражнение 4.** Определите, чем выражено подлежащее каждого предложения, переведите.

1. After the international conference on ecology it has become possible to begin working at environmental problems on a global scale. 2. Some scientists and engineers are working at improving traditional production processes, others are developing new technologies. 3. The new instruments will enable us to determine the level of pollution in our rivers. 4. Our technological advances make it possible to deal with the most difficult problems. 5. Our lecturer's book on strength of materials is well-known and popular. 6. One must study six years to become an engineer. 7. There is a big



library in the new building of our institute. It is a very good library. One may get all the necessary books there and it is possible to keep them till the end of the academic year. 8. It is well-known that technological progress is impossible without electronics, computers, robots and new materials. 9. That ecological problems have become the most important ones at present is evident to all. 10. What is necessary for the students is to get a good qualification. 11. That S.P. Korolyev was the founder of practical cosmonautics is a well-known fact. 12. That theory is combined with practical training is a very good tradition of our educational system. 13. That it is necessary to develop an international ecological program is realized throughout the world.

**Упражнение 5.** Найдите сказуемое в каждом предложении, переведите.

1. The electronic industry produces several types of minicomputers. 2. The air in many cities has been polluted by traffic and industry. 3. The lecture on environment protection was very interesting. 4. Mankind has never experienced changes in life and work on such a scale. 5. The task of the world community is to improve the ecological situation in the world. 6. In six years we shall become engineers. 7. It is possible to take measures to protect environment on a global level by the joint efforts of all countries. 8. Professor N. is the dean of our faculty. 9. The important feature of our education is that it combines theory with practical training. 10. The main tendency of our life is that computers are being used in all spheres of technology, science and everyday life. 11. The essential feature in environment protection is that most of it is done by public initiative. 12. What is necessary today is that the protection of global natural resources must be planned. 13. Today one of the most important problems is that big cities are polluted.

## СЛОВООБРАЗОВАНИЕ

**Упражнение 6.** Переведите следующие производные слова согласно образцу:

<p><i>глагол + -er/-or = существительное</i></p>	<p><i>to teach — учить, обучать → teacher — учитель to lecture — lecturer, to speak — speaker, to invent — inventor, to generate —</i></p>
--	--

	generator, to transform — transformer, to indicate — indicator, to compute — computer;
<b>суффиксы прилагательных -ant/-ent</b>	<i>to excel — превосходить → excellent — превосходный</i> important, efficient, distant, evident, confident, recent;
<b>отрицательные префиксы in-/im-</b>	<i>questionable — спорный → unquestionable — неоспоримый,</i> material — immaterial, limited — unlimited, important — unimportant, usual — unusual, natural — unnatural, necessary — unnecessary, known — unknown, qualified — unqualified, changing — unchanging, seen — unseen, possible — impossible, perfect — imperfect, personal — impersonal, mobile — immobile.

## СЛОВА И СЛОВСОЧЕТАНИЯ ДЛЯ ЗАПОМИНАНИЯ

**advantage** *n* — преимущество

**appearance** *n* — появление

**application** *n* — применение, заявление

**completely** *adv* — полностью, целиком

**consumption** *n* — потребление, расход

**cover** *n* — охватить, охватывать,

**design** *v* — конструировать, проектировать

**device** *n* — прибор, устройство

**double** *v* — удваивать

**efficient** *a* — эффективный

**generate** *v* — вырабатывать, производить

**power** *n* — энергия, мощность

**property** *n* — свойство

**recent** *a* — недавний, последний

**reduce** *v* — уменьшать, снижать

**replace** *v* — заменять

**set up (set)** *v* — воздвигать, сооружать

**source** *n* — источник

**state** *n* — положение, состояние

**such as** — такой как

**transform** *v* — преобразовывать

**turn** *v* — поворачиваться, обратиться; превратить (into)

**wide** *a* — широкий

**without** *prp* — без

**whole** *a* — весь, целый

**imagine** v — представлять  
себе, воображать  
**invent** v — изобретать

**in the case of** — в случае  
**to be based on** — основываться,  
быть основанным на

### Text 3A

Прочитайте текст, перечислите наиболее важные изобретения в области электротехники. Переведите.

### Electricity

It is impossible to imagine our civilization without electricity: economic and social progress will be turned to the past and our daily lives completely transformed.

Electrical power has become universal. Thousands of applications of electricity such as lighting, electrochemistry and electrometallurgy are longstanding and unquestionable.

With the appearance of the electrical motor, power cables replaced transmission shafts, gear wheels, belts and pulleys<sup>1</sup> in the 19-th century workshops. And in the home a whole range of various time and labour saving appliances<sup>2</sup> have become a part of our everyday lives.

Other devices are based on specific properties of electricity: electrostatics in the case of photocopying machine and electromagnetism in the case of radar and television. These applications have made electricity most widely used.

The first industrial application was in the silver workshops in Paris. The generator — a new compact source of electricity — was also developed there. The generator replaced the batteries and other devices that had been used before.

Electric lighting came into wide use at the end of the last century with the development of the electric lamp by Thomas Edison. Then the transformer was invented, the first electric lines and networks were set up, dynamos and induction motors<sup>3</sup> were designed.

Since the beginning of the 20th century the successful development of electricity has begun throughout the industrial world. The consumption of electricity has doubled every ten years.

Today consumption of electricity per capita<sup>4</sup> is an indicator of the state of development and economic health of a nation. Electricity has replaced other sources of energy as it has been realized that it offers

improved service and reduced cost.

One of the greatest advantages of electricity is that it is clean, easily-regulated and generates no by-products<sup>5</sup>. Applications of electricity now cover all fields of human activity from house washing machines to the latest laser devices. Electricity is the efficient source of some of the most recent technological advances such as the laser and electron beams. Truly<sup>6</sup> electricity provides mankind with the energy of the future.

#### Notes to the Text

1. transmission shafts, gear wheels, belts and pulleys — трансмиссионные валы, зубчатые колеса, ремни и блоки
2. time and labour saving appliances — электроприборы, экономящие время и труд
3. induction motors — индукционные моторы
4. per capita — на человека; на душу населения
5. by-products — побочные продукты
6. truly — поистине

#### УПРАЖНЕНИЯ

**Упражнение 7.** Просмотрите текст 3А и ответьте на вопросы.

1. What is this text about? 2. What industrial applications of electricity do you know? 3. What home applications of electricity do you know? 4. Where was the generator developed? 5. Who invented the electric lamp? 6. Do you know who invented the dynamo? 7. Can you imagine our life without electricity? Why?

**Упражнение 8.** Определите функции глагола *to have*, переведите.

1. Electricity has many useful properties: it is clean and generates no by-products. 2. It has many important applications in industry as well as in our houses. 3. The latest laser devices have found application in medicine. 4. Electricity has provided mankind with the most efficient source of energy. 5. No other source of energy has been so widely used as electricity. 6. We have many various electric devices in our houses. 7. Our lives have been completely transformed with the appearance of electricity. 8. The generator replaced batteries that had been used before. 9. The consumption of electricity has doubled every ten years.

**Упражнение 9.** Найдите подлежащее и сказуемое в предложениях, переведите.

1. That electricity is clean and easily-regulated is its great advantage. 2. The important fact is that electricity offers improved service at reduced cost. 3. That the two scientists Lodygyn and Yablochkov were the first in Russia to work in the field of electrical engineering is well-known. 4. One of the main advantages of electricity is that it does not pollute the environment. 5. The indicator of nation development is how much electricity is consumed per capita. 6. What has been and is being done in environment protection cannot be measured by yesterday's standards.

**Упражнение 10.** Определите время и залог глагола-сказуемого, переведите предложения.

A. 1. I have not cleaned the window yet. I am cleaning it now. I have cleaned it. 2. But Bob has a different idea. 3. Last year she passed school leaving exams. 4. We will be studying for our exams at the end of the term. 5. While we were having supper, all the lights went out. 6. Will people speak the same language all over the world? 7. People will land on Mars in the 21st century. 8. I think cars will be powered by electric batteries in five years' time and they will not be powered by atomic power in 100 years' time. 9. The Earth is getting warmer because of the increase of carbon dioxide in the atmosphere.

B. 1. It is evident that electricity will be the energy of the future. 2. The transformer was invented and the first electric lines and networks were set up at the end of the 19th century. 3. New powerful electric stations must be built because it is electricity that offers improved standards of life and work. 4. A combination of electric lines and networks are being set up throughout the country. 5. Electric power has become universal. 6. Electricity is transmitted to distant parts of this country by a combination of electric networks. 7. Our power stations have been connected by high voltage transmission lines into several networks.

## УПРАЖНЕНИЯ ДЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ

**Упражнение 11.** Определите, к какой части речи относятся производные слова и переведите их.

invent — inventor, inventive, invention;  
 transform — transformer, transformation;  
 generate — generator, generation, generative;  
 pollute — polluter, pollutant, pollution;  
 effect — effective, effectively;  
 vary — variety, various;  
 possible — impossible, possibly, possibility;  
 complete — completely;  
 recent — recently;  
 replace — replacement;  
 economic — economical, economically.

**Упражнение 12.** Найдите:

а) синонимы:

application, appliance, latest, power, use, enable, reach, device, longstanding, make it possible, achieve, energy, transform, old, turn to, most recent;

б) антонимы

future, unlimited, with, past, necessary, limited, old, unnecessary, without, present.

**Упражнение 13.** Поставьте глагол в скобках в соответствующем времени.

My brother (enter) Moscow University (long ago, already, just, next year, last year, this year, by the end of the month, when I came to Moscow).

**Упражнение 14.** Найдите предложения со словами *to have, one, that*, переведите.

Although the US is a large country with many peoples the language is almost the same wherever one goes. There are two reasons for this. One is that people move around a great deal in the US. A man can grow up in one part of the country, go to college in another place, find work in another

place and marry a girl from still another part of the country.

The second important factor is public communication. Movies, radio and television all have standard way of speech. The southern part of the US is probably the region with the most individual speech. Southern pronunciation differs from that in the rest of the country. Southerners talk slowly and often do not pronounce «r» or a final «g». Another common Southern expression is the unusual use of the word «evening». In most parts of the country this means the time after the sun goes down, the early part of the night, but to a Southerner it can mean any time after twelve o'clock noon. In the southern mountains there have not been new settlers from other countries for two hundred years. They have ways of speech that are like the English spoken centuries ago when the first people came there from England. Many songs they sing today are those sung long ago in England.

**Упражнение 15.** Прочитайте и переведите текст без словаря.

Before Faraday's inventions in the field of electricity and magnetism the only source of electricity that was used was the galvanic battery. It made possible some practical applications: the electric light and electric telegraph. The practical use of electricity on a larger scale became possible after developing electromagnetic machines, generators and transformers. It is considered that the development of the induction motor has become the most important technical achievement. At first, the induction motor had a constant and unchangeable speed (скорость). Some years later a motor with two speeds was designed. Since its invention the induction motor has been considerably improved and its power increased. But the principle of operation still remains the same.

## CONVERSATION

**Exercise 1.** Answer the questions.

1. What is electricity? (a source of electric power used in every day life and industry) 2. What are the sources of electricity? (batteries, generators, electric motors and many other devices) 3. What properties of electricity have made it widely used? (electrostatics and electromagnetism) 4. What are the advantages of electricity? (clearness, easy regulation, no byproducts, low cost, improved service) 5. What are home uses of

electricity? (lighting, heating, various time and labour saving appliances, radio, television, video and many others) 6. What are the latest industrial applications of electricity? (lasers and electronic devices).

**Exercise 2.** Make a sentence out of the two parts.

1. Electricity	a) have already become universal.
2. The applications of electricity in the home and industry	b) has completely transformed our everyday life.
3. Electricity was used for the first time	c) per capita is an indicator of the d) state of development of a nation.
4. The generator, a new source of electricity	e) the wide industrial use of electricity has begun throughout the world.
5. Since the beginning of the 20-th century	f) was also developed in Paris.
6. Today consumption of electricity	g) for industrial purposes in the silver workshops in Paris.

**Exercise 3.** Speak about:

1. Electricity — its nature, history and development.
2. Applications of electricity cover all fields of human activity.

Use exercises 1, 2, as well as the following words and word combinations for your topic:

it is difficult to imagine; applications such as; completely; to replace; to come into wide use; to double every ten years; to be an indicator; the latest technological advances.



### Text 3B

Прочитайте текст. Найдите информацию о наиболее перспективных источниках энергии и об основных отличиях нетрадиционных источников энергии от традиционных. Изложите основное содержание текста по-английски.

#### **Non-traditional Renewable Sources of Energy**

It is known that much is being done in the world today for the development of non-traditional sources of energy. Without them the Earth cannot support its present population of 5 billion people and probably 8 billion people in the 21st century.

Now we are using traditional power sources, that is, oil, natural gas, coal and water power with the consumption of more than 50 billion barrels per year. It is evident that these sources are not unlimited.

That is why it is so important to use such renewable sources of energy as the sun, wind, geothermal energy and others. Research is being carried out in these fields.

One of the most promising (перспективный) research is the development of power stations with direct transformation of solar energy into electricity on the basis of photo-effect. It was Russia that was the first in the world to develop and test a photoelectric battery of 32,000 volts and effective area of only 0.5 sq.m., which made it possible to concentrate solar radiation. This idea is now being intensively developed in many countries.

However, the efficiency of a solar power station is considerably reduced because of the limited time of its work during the year. But it is possible to improve the efficiency of solar power stations by developing different combinations of solar power stations and traditional ones — thermal, atomic and hydraulic. Today some engineers are working at the problem of developing electric power stations with the use of a thermal-chemical cycle. It will operate on products of the transformation of solar energy, whereas the «solar» chemical reactor uses CO<sub>2</sub> and water steam of the thermal power station. The result is that we have a closed cycle.

In Kamchatka there are geothermal power stations operating on hot water-steam mixture from the depths of about a kilometre. In some projects water will be heated by the warmth of mountains at a depth of four—five km.

It is planned that plants working on the energy of the solar heat provided by the sun will be built on a larger scale.

That different wind energy plants are being developed is also well-known. These energy plants can be small (of several kilowatts) and large powerful systems.

It is important that all these advances in developing new sources of energy and improving the old ones help to solve the energy problem as a whole and they do not have negative effects on the environment.

### ДОПОЛНИТЕЛЬНЫЕ ЗАДАНИЯ

**Упражнение 1. А.** Прочитайте следующие словосочетания из текста 3А и постарайтесь догадаться о значении выделенных слов и словосочетаний.

1. such as **lighting**
2. applications are **longstanding**
3. in the 19th century **workshops**
4. **a range** of appliances
5. devices are **based** on
6. **in the case of**
7. all **fields of**
8. **human activity**

**В.** Подберите к каждому выделенному в А слову или словосочетанию соответствующее ему по значению.

- |                    |                       |
|--------------------|-----------------------|
| a. for             | e. a number of        |
| b. area or sphere  | f. things done by man |
| c are built on     | g. electric lamps     |
| d. for a long time | h. a small factory    |

**Упражнение 2. А.** Прочитайте текст и найдите слова или словосочетания, означающие *portable, work, generate, at present*

Although most electricity comes from power stations, power can also be generated by far smaller means. Nowadays, electricity generators can be small enough to hold in the hand. A portable generator can provide electricity no matter how far you are from the mains (сеть). It works by turning the movement of a piston into electrical energy. Such a generator can produce a 700 watt output, enough to operate lights, television, and

some domestic appliances. Larger versions provide emergency power to hospitals and factories.

В. Найдите в тексте, приведенном в А, слова, означающие:

1. method, way
2. change, transform
3. principal wire to transmit electricity into a building
4. house
5. to be of no importance
6. much, considerably
7. situation needing action as soon as possible
8. power, energy produced
9. variant, form

**Упражнение 3.** Заполните пропуски следующими словами:

electricity, increase, consumers, power, use, generation, reduce, consumption, far, users, application, provide, sources, energy, light.

We hear so much these days of local problems of electricity (1) ... Many (2) ... are taking steps to (3) ... their electricity (4) ... This is as a result of the recent (5) ... in electricity tariffs for (6) ... We should all try to (7) ... less (8) ..., by insulating our houses, turning off the (9) ... when leaving a room and using less hot water.

We must try to develop alternative (10) ... of energy to (11) ... electricity for domestic and industrial (12) ... It is known that nuclear power comes to the consumer as electricity, which is clean and convenient form of (13) ... Although nuclear (14) ... stations are large, they can be built (15) ... from places where people live.

**Упражнение 4.** Заполните пропуски антонимами выделенных слов.

1. Though the capital investment, that is, the initial cost of building the nuclear power station, is **high**, the cost of generating electricity from a nuclear power station is relatively ....

2. There is a **limited** supply of fossil fuels such as oil, gas and coal on the earth, but a supply of natural uranium is ... .

3. **Cheap impure** coal produces much more CO<sub>2</sub> than ..... coal of high quality.

4. It is evident to all that an **old inefficient** power station is more dangerous to the environment than a .....power station.

**Упражнение 5.** Заполните таблицу на словообразование.

Verb	Noun	Personal noun
...	...	<b>producer</b>
...	<b>operation</b>	...
<b>generate</b>	...	...
...	...	<b>mover</b>
<b>act</b>	...	...
...	<b>design</b>	...
<b>invent</b>	...	...
<b>consume</b>	...	...
...	<b>transformation</b>	...
...	<b>regulation</b>	...
<b>indicate</b>	...	...

**Упражнение 6.** Составьте возможные словосочетания глаголов из колонки А и существительных из колонки В, переведите их и запомните.

A	B
1. carry out (conduct)	a. a problem
2. solve (face, work at, deal with)	b. changes
3. become	c. a success
4. suffer from	d. an effect on
5. bring about	e. measures
6. have	f. study, research, experimental work
7. make	g. the center of, a part of
8. develop	h. investments
9. take	i. a program, concept, theory
10. achieve	j. noise, pollution

**Упражнение 7.**

**A.** Назовите 10-15 ключевых слов и словосочетаний на тему:  
«Electricity as a source of energy».

**B.** Speak about:

The main types of fuel or processes used to generate energy in our country.

## REVISION OF MODULES 1-3

**Упражнение 1.** Повторите времена группы Indefinite (Simple), Continuous, Perfect Active, Passive. Определите время глагола-сказуемого и переведите предложения.

1. What course are you taking here? Business English? — No, I am not doing Business English yet. I am trying to improve my general English, especially conversation. 2. I liked the lecturer better after I had heard him the second time. 3. My friend will take the course in English next semester. 4. Who has finished the test? 5. We looked at him while he was dancing. 6. How many books of Shaw have you read? 7. Why have not you told them about it? 8. I shall still be studying English in two years' time. 9. The books were taken from the library. 10. You can find the books taken from the library on the table. 11. The exams are held in June. 12. I have been in the laboratory since 8 o'clock. 13. There were many people coming back from their work. 14. Australia is one of the five continents, but it is much smaller than the other four. 15. The light in that room is poor. Please light the candles (свечи). 16. People speak the language of their country. 17. Every country needs good specialists for its further progress of science and technology. 18. By the year 2030 human labour in industry will have been replaced by robots. Families will have robots to do the housework.

**Упражнение 2.** Ответьте на вопросы.

What devices and machines using electricity

- a) have become a part of our everyday life?
- b) have made electricity most widely used in all fields of science, technology and industry?
- c) are based on its specific properties?

**Упражнение 3.** Заполните пропуски следующими словами:

radar battery generator appliances dynamo transformer

1. ... is a machine that generates electricity, steam, gas, etc.
2. A device giving information about position, movement, etc. is named ....
3. A machine for changing water and steam power into electrical energy is known as ....
4. Food mixers, toasters, modern dish-washers and a number of the most recent home devices are household ....

5. An apparatus to increase or decrease the voltage of an electric power supply — ... — was invented at the end of the 19th century.
6. It is known that a portable cell for supplying electricity is called ...

**Упражнение 4. А.** Прочитайте и переведите текст, обращая внимание на проработанную грамматику уроков 1—3.

### **Save the Planet**

Today's global economy has been formed by market, not by the principles of ecology. This has created an economy that is destroying its natural support system (система естественной поддержки). It is eco-economy that we need today to save the planet. An eco-economy is one that satisfies our needs without affecting the prospects of future generations to meet their needs. Therefore, it is necessary to turn our economy into in eco-economy. To build an eco-economy means to restore carbon balance, to stabilize population and water use, and to conserve forests, soils and variety of plant and animal life in the world.

Such an eco-economy will affect every side of our lives. It will change how we light our homes, what we eat, where we live, how we use our free time, and how many children we have. It will give us a world where we are a part of nature.

Building a new economy means eliminating and replacing old industries, restructuring existing ones, and creating new ones. The generation of electricity from wind is one such industry. Soon millions of turbines will be turning wind into electricity. In many countries, wind will provide both electricity and hydrogen. Together, electricity and hydrogen can meet all the energy needs of a modern society.

Another industry that will play an important part in the new economy is management of available water supply most efficiently. Irrigation technology will become more efficient. The recycling of urban waste water will become common. At present, water flows into and out of cities, carrying waste with it. In the future, water will be used again and again, never discharged (спускать, выливать). As water does not lose its quality from use, there is no limit to how long it can be used, as long as (пока) it is cleaned before reuse.

One can easily see eco-economy changes in some countries. It is known that Denmark is the eco-economy leader. It has stabilised its

population, banned (запрещать) the construction of coal power plants, banned the use of non-refillable drink containers, and is now getting 15 per cent of its electricity from wind. Besides, it has restructured its urban transport networks; now 32 per cent of all trips in Copenhagen are on bicycles. Denmark is still not close (near) to balancing carbon emission, but it is moving in that direction.

B. Speak about:

Your idea of the economy of the future.



## References

1. Ионина А.А., Саакян А.С. Английская грамматика XXI века: Универсальный эффективный курс. – М.: Эксмо, 2014. – 416 с.
2. Орловская И.В., Самсонова Л.С., Скубриева А.И. Учебник английского языка для студентов технических университетов и вузов. — 6-е изд., стереотип. (Иностранный язык в техническом университете). — М: Изд-во МГТУ им. Н.Э. Баумана, 2006. — 448 с.