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ВВОДНО-КОРРЕКТИВНЫЙ КУРС ПО ГРАММАТИКЕ АНГЛИЙСКОГО ЯЗЫКА

(учебное пособие)

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ТУСУР
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Введение

Настоящее учебное пособие предназначено для студентов ТУСУР направлений бакалавриата и специалитета РТФ (радиотехнического факультета). Пособие состоит из 7 уроков (Lessons 1-7), которые содержат грамматический материал и микротексты профессиональной направленности и предназначены для изучения в первом семестре (18 часов аудиторных занятий и 18 часов самостоятельной работы). Пособие содержит приложения, включающие краткую информацию по фонетике английского языка и таблицы основных способов словообразования. Основной целью пособия является компенсация недостатка или отсутствия грамматических умений и навыков в рамках базового уровня школьной программы.

LESSON 1

a – an	<i>какой-то, один из</i>	be	<i>являться, находиться</i>
the	<i>этот</i>	I am	
one, two, three ...	<i>1, 2, 3...</i>	he / she / it is	
eleven, twelve, thirteen ...	<i>11, 12, 13...</i>	we / you / they are	
twenty, thirty, forty...	<i>20, 30, 40</i>	I / he / she / it was	
a hundred, a thousand, a million	<i>100, 1000, 1000000</i>	we / you / they were	
first, second, third ...	<i>1st, 2nd, 3rd ...</i>	will be	
eleventh, twelfth, thirteenth ...	<i>11th, 12th, 13th ...</i>	being	<i>являющийся, находящийся,</i>
twentieth, thirtieth, fortieth ...	<i>20th, 30th, 40th ...</i>	been	<i>являвшийся, находившийся</i>
this – these	<i>этот – эти</i>	to have	<i>иметь, обладать</i>
that – those	<i>тот – те</i>		
all – any – some – no	<i>все – любой – некоторый – никакой</i>	I / you / we / they have	
another – other	<i>другой - другие</i>	he / she / it has	
every, each	<i>каждый</i>	had	
such	<i>такой</i>	will have	
many (students)	<i>много (студентов)</i>	having	<i>имеющий(ся)</i>
much (time)	<i>много (времени)</i>	had	<i>имевший(ся)</i>
more	<i>больше</i>		
most	<i>больше всего, наибольший</i>	to do	<i>делать</i>
few (students)	<i>немного (студентов)</i>	I / you / we / they do	
little (time)	<i>немного (времени)</i>	he / she / it does	
less	<i>меньше</i>	did	
least	<i>меньше всего, наименьший</i>	will do	
I – he – she – it	<i>я – он – она – оно</i>	doing	<i>делающий</i>
we – you – they	<i>мы – вы – они</i>	done	<i>сделанный</i>
my – his – her – its	<i>мой – его – ее – его</i>	there + to be	<i>иметься, находиться</i>
our – your – their	<i>наш – ваш - их</i>	there is – there are	
me – him – her – it	<i>мне (меня), ему (его), ей (ее), ему (его)</i>	there was – there were	
us – you – them	<i>нам (нас), вам (вас), им (их)</i>	there will be	

Exercise 1. Read and translate the numerals.

Nine, four, ten, eight, eleven, first, third, twelfth, seventeen, twentieth, hundred, second, thirteen, tenth, eighteenth, forty, nineteen, fifteen, seventieth, sixtieth, twenty, thousand, third, eighty, nineteenth, two hundred and sixty, seven hundred and thirty- first, one thousand five hundred and forty, fifty-fifth, one hundred and eighty seven, four thousand one hundred and ninety, twenty seventh.

Exercise 2. Read and translate the following words.

Many, every, another, no, all, such, those, this, least, little, much, each, other, less, some, that, these, any, more, few, some, the, most, those, no, every, these, most, some, more, few, any, that, less, each, little, this, some, other, much, least, those, all, another, many, such, no, every, some, that, other, any.

Exercise 3. Read and translate the pronouns.

Me, its, them, he, us, you, her, we, his, their, it, she, my, her, your, our, they, me, it – its – it, their, his, my, us, them, him, our, it, me, its, your.

Exercise 4. Read and translate the following groups of words.

It was, he had, they will be, I was, we were, it will be, there is, it has, there was, they were, she had, there will be, they will be, they will have, I did, we do, they have, he has, I will be, there were, they were.

Exercise 5. Read and translate the following words.

Twelfth, another, that, eleven, any, some, such, few, more, us, it, there was, were, having, those, no, other, most, each, its, had, there will be, was, doing, there are, them, another, does, us, done, being, less, much, did, few, doing, such, each, its, our, their.

Negative and interrogative forms of the verbs *to be*, *to have* and *there to be* construction

Exercise 6. Make the following sentences negative or interrogative, as in the model.

- Model A:** – I am seventeen. (–)
– I'm **not** seventeen.
– She **is** *my* daughter. (?)
– **Is** she *your* daughter?

- Model B:** – I **have** got a brother. (–)
– I **haven't got** a brother. (*or*: I **have no** brother.)
– He **has got** a car. (?)
– **Has he got** a car?

- Model C:** – There **is** a pen on the table. (–)
– There **isn't** a pen on the table. (*or*: There **is no** pen on the table.)
– There **are** *some* students in the class. (?)
– **Are** there *any* students in the class?

1. They are married. (–)
2. She is from Spain. (?)
3. I am a driver. (–)
4. There are some mistakes in your test. (?)
5. He has got some friends. (–)
6. They are from the USA. (–)
7. It is near the chair. (?)
8. They are programmers. (–)
9. I have got a personal computer. (?)
10. I am a student. (?)
11. He is a pilot. (–)
12. We are from Italy. (?)
13. There is some money in my pocket (–)
14. There is a marker on the desk. (?)
15. Her name is Julia. (–)

Exercise 7. Fill in the blanks with the appropriate forms of the verbs *to be* or *to have*.

1. Peter ... a sister.
2. Her name ... Ann.
3. They ... students of the university.
4. Last year they ... schoolchildren.
5. In five years they ... engineers.
6. I ... at home.
7. ... you at home two hours ago? No, I ... not. I ... at the university.
8. ... you got a brother? Yes, I
9. How old ... you? I ... 17.
10. How old ... your mother? She ... 45.
11. ... there a picture on the wall? No, there ... no picture on the wall.
12. ... there chairs there? Yes, there
13. Yesterday there ... many students in the library.
14. Will you ... lessons tomorrow?

Exercise 8. Fill in the blanks with the possessive pronouns corresponding to the Russian pronoun *свой*.

1. He wants to read ... translation to you.
2. She helps ... sister.
3. They begin ... work at nine o'clock.
4. We like ... university.
5. In the morning my sisters take ... books and go to school.
6. I work with ... friend.
7. You must get ... books from ... bag and put them on the table.
8. He makes ... experiment every day.
9. They make ... experiment every day.

Exercise 9. Fill in the blanks with the appropriate pronouns.

1. ...state helps ... to get higher education.
2. Will you show new hostel?
3. Do ... friends help ... in ... work?
4. I saw ... yesterday.
5. ... lessons begin at 9 o'clock.
6. My friend came to see ... last night.
7. An old man asked ... to help
8. My friends invited ... to ... party.
9. The student couldn't answer ... questions.
10. I can't do this work without ... help.

Exercise 10. Translate the following sentences from Russian into English.

1. У него нет уроков.
2. В лаборатории много современных приборов.
3. Их нет дома.
4. В нашей группе 20 студентов.
5. В нашем городе нет университетов.
6. В вашем городе есть институт?
7. Мы обычно бываем дома вечером.
8. У нас нет свободного времени.
9. Вчера его не было дома.
10. У них будет 4 экзамена в этом семестре.
11. В 5 часов вечера мы будем в библиотеке.
12. Там будет интересная лекция.

LESSON 2

can	<i>могу, умею (для всех лиц и чисел)</i>	though (although)	<i>хотя</i>
(could), may (might)	<i>(мог, умел) могу (можно), может быть</i>		
be able to, must, need	<i>мочь, быть способным, должен нужно</i>	because	<i>потому что</i>
that	<i>тот, что, который</i>	as	<i>как, так как</i>
what	<i>что, какой</i>	for	<i>для, в течение, так как</i>
who	<i>кто, который</i>	since	<i>с, так как</i>
which	<i>который</i>	before	<i>до; перед тем как</i>
while	<i>в то время как (когда)</i>	after	<i>после; после того как</i>
when	<i>когда</i>	where	<i>где</i>
whether	<i>ли</i>	why	<i>почему, зачем</i>
if	<i>если</i>	how	<i>как</i>
whereas	<i>в то время как, когда</i>	how many (much)	<i>сколько</i>

Exercise 1. Read and translate the modal verbs.

Can, could, be able to, might, may, must, need, may, could, must, was able to, can, might, could, must, can, need, may, is able to, will be able to.

Exercise 2. Read and translate the following words.

That, what, who, which, while, when, how, whether, if, where, whereas, though, because, as, since, before, after, where, if, how many, whether, when, while, which, who, what, that, since, as, for, after, before, although, whereas, how, why, if, that, which, where, when, whether, since, as, for, what, because, while, though, after, if, whereas, although, when, that, why, how many.

Exercise 3. Read and translate the following words.

As, can, that, if, what, because, was able to, since, how, though, must, whether, could, if, where, for, might, need, when, while, could, which, whereas, because, is able to, after, could, as, must, that, can, though, might, while, how, whether, since, as, for, why, how many.

Exercise 4. Read and translate the following sentences. Pay attention to the modal verbs.

1. Students must take exams in January.
2. She can speak French well.
3. You may take this book till tomorrow.
4. We must learn new words every week.
5. I can go by bus or I can walk.
6. You may come in.
7. We can take this book from the library.
8. She can't do this work in time.
9. They must go to Moscow for a few days.
10. We were able to read this article without dictionary.
11. Everyone must know a foreign language.
12. He could do this work without any help.
13. Students may ask a lot of questions after the lecture.
14. You couldn't translate the text as it had many new words.
15. You may enter any university in our country after you finish school.
16. This subject is very important for our future speciality.
17. You must pass all the exams well to enter the university.

Exercise 5. Read and translate the following sentences.

1. We can see electrical devices everywhere.
2. Today we can't imagine the world without telephone and television.
3. We will study electronics for two years.
4. Computers and robots are important for industrial use.
5. To make supercomputers we need highly developed electronics.
6. We may communicate over long distances with the help of satellite systems.
7. People couldn't solve many complex engineering problems without computers.
8. You may take part in our discussion.
9. We must make a report on the results of his calculations.
10. Ultraviolet radiation may produce ionization.
11. We must measure the distance between the elements.
12. After the invention of engine the first industrial revolution started.
13. He says that the graduates must be able to work with the technology of tomorrow.
14. New robots will have some manipulators that will carry out many functions.

Exercise 6. Translate the sentences from Russian into English.

1. Он может читать и писать по-английски.
2. Она должна сделать эту работу в конце месяца.
3. Теперь студенты могут войти в аудиторию.
4. Он должен прочитать эту статью.
5. Можно мне взять ваш учебник?
6. Я должен пойти в библиотеку и взять книги.
7. Этот ребенок умеет ходить?
8. Вы должны вернуть книгу завтра.
9. Вы можете закончить эту работу завтра.
10. Статья должна быть напечатана в газете.
11. Они могли узнать об этом изобретении.
12. Я не могу больше ждать, я должен идти. Вы тоже можете идти домой.
13. Можно нам присутствовать на конференции? – Конечно!
14. Студенты могли продолжить эту интересную работу.
15. Модель может и не иметь этих свойств, но это надо проверить.
16. Их работа может стать основой для новой отрасли науки.
17. Они должны работать в очень трудных условиях.

Exercise 7. Read and translate the text.

Physics is the science that studies different phenomena in nature. Its object is to determine exact relations between physical phenomena. There are two great branches in physics: experimental and theoretical. The task of the experimental branch is to make observations and carry out experiments. On the basis of the experimental facts theoretical physics formulates laws and predicts the behavior of natural phenomena. Every law is based on experiments. Scientists all over the world do their best to find answers to many unsolved problems.

LESSON 3

Prepositions

Cases		Place and movement	
of	<i>кого, чего</i>	in	<i>в</i>
for	<i>для</i>	on	<i>на</i>
to	<i>кому</i>	to	<i>к</i>
by	<i>кем, чем</i>	from	<i>из, от</i>
with	<i>чем, с</i>	into	<i>внутри</i>
without	<i>без</i>	out of	<i>изнутри</i>
about	<i>о</i>	near (at)	<i>рядом (у)</i>
Time		behind	<i>позади</i>
by	<i>к</i>	over	<i>выше</i>
at	<i>в</i>	below	<i>ниже</i>
before	<i>перед (тем как)</i>	above	<i>над</i>
after	<i>после (того как)</i>	under	<i>под</i>
since	<i>с</i>	across	<i>поперек</i>
till (until)	<i>до</i>	along	<i>вдоль</i>
during	<i>в течение</i>	around	<i>вокруг</i>
for	<i>во время</i>	against	<i>напротив</i>
within	<i>в рамках</i>	among	<i>среди</i>
in 2010, in winter, in May		between	<i>между</i>
on Monday, on the 1st of May			
in the morning / evening / afternoon			
at (mid)night			
in a day			
for a week			
			Cause
		because	<i>потому что</i>
		because of	<i>из-за</i>
		since, as, for	<i>так как</i>

Exercise 1. Read and translate the following prepositions.

By, with, without, as, because of, before, since, till, during, after, within, to, into, out of, from, of, near, at, in, behind, below, of, under, above, around, across, along, about, of, against, among, between, below, by, since, during, within, till, between, across, of, because of, for, as, along, under, into, to, with, without, by, during, of, since, behind, against, from, at, below, because of.

Exercise 2. Read and translate the following word-groups.

In the morning, in the afternoon, in the evening, at night, in September, in spring, in autumn, in winter, in 2000, in a day, in five days, on the first of September, on the fifth of February, on Sunday, on Monday, on Tuesday, on Wednesday, on Thursday, on Friday, on Saturday.

At three o'clock, at seven o'clock, by five o'clock, by the morning, at night, for three days.

At the temperature, at the voltage, at the concentration, at a speed, at the angle, at the pressure, at the energy, at a frequency, at a point, at the altitude, under the

action of, under (in) some conditions, under (in) vacuum, in contrast to, in fact, on the basis of, as a result, under the load, in the region of spectrum.

Exercise 3. Read and translate the following words.

Where, the, thirty, doing, whereas, those, fiftieth, though, no, him, having, second, because, can, there is, another, why, seventeenth, as, there was, it, to, of, eighth, before, has, out of, whether, may, them, few, for, when, had, by, while, with, such, no, within, during, because of, how, first, that, will, near, on, some, their, at, fourth, them, had, other, his, above, below, how many, under, of, why, one hundredth, more, least, him, twelfth, less, although, most, its, must, was able to, it, done, there were, fifteenth, when, why, in the afternoon, how, in July, in winter, in 2050, in five years, on the thirtieth of August, on Sunday, at nine o'clock, at night, by the evening, for a day, in the picture, at speed of, in fact, as a result.

Exercise 4. Translate the following word-groups into English.

На занятиях, на собрании, у доски, учиться в университете, идти в институт, утром, летом, в аудитории, через день, в четыре часа, на улице, на заводе, в сентябре, пятнадцатого октября, днем, в воскресенье, первого января, во время экзаменов, в течение года, из университета, в библиотеку, к концу семестра.

Simple Tenses

Present Simple	Past Simple	Future Simple
always...never, twice a week, every <i>day/week/year/Monday</i>	yesterday, last Monday / <i>week / month</i> in 2010 / <i>May</i> , when I was 10 / <i>in Japan</i>	tomorrow, next <i>Monday /week /</i> <i>month/year</i>
S + V(s)*	S + Ved/2	S + will V
I go to the cinema <i>every week</i> . (He <u>goes</u> ...)	I went to the cinema <i>yesterday</i> . I played tennis in 2009.	I will go to the cinema tomorrow (if I have time)*
Do / Does + S + V?	Did + S + V?	Will + S + V?
Do you go to the cinema every week? Yes, I do . /No, I don't . (Does he go ...? - Yes, he does . / No, he doesn't .)	Did you go to the cinema yesterday? Yes, I did . / No, I didn't .	Will you go to the cinema tomorrow? Yes, I will . / No, I won't .
S + don't / doesn't + V.	S + didn't + V.	S + won't + V.
I don't go to the cinema every week. (He doesn't go ...)	I didn't go to the cinema yesterday.	I won't go to the cinema tomorrow.

Exercise 5. Put the following sentences into negative and interrogative forms.

1. You **speak** English well.
2. These students **live** in a hostel.
3. His brother **studies** at the University.
4. The teacher **delivers** lecture on mathematics.
5. She **is** a first-year student.
6. Students **make** a new experiment.
7. They **study** hard.
8. We **work** at the laboratory.
9. He **studied** at school last year.
10. They **got** all the necessary things.
11. We **were** at the University museum yesterday.
12. My brother **became** an engineer two years ago.
13. Her parents **graduated** from the University.
14. The engineers **worked** in the field of nuclear physics.
15. The students **asked** many questions at the lesson.
16. On Sunday I **got up** at 10 o'clock.
17. Our lectures **begin** at 9 o'clock.
18. We **were** schoolchildren last year.
19. We **had** four entrance exams in summer.
20. Yesterday the first-year students **saw** the institute laboratories.

Exercise 6. Put the questions to the underlined words or word-groups.

1. The students make various experiments at the laboratory.
2. The teacher holds seminars on history.
3. There are twenty students in our group.
4. Many students of our group live in the hostel.
5. They studied at school last year.
6. We went to the lecture in the morning.
7. The academic year starts in September.
8. There are six universities in Tomsk.
9. My parents graduated from the University twenty years ago.
10. These engineers worked in the field of electronics.
11. The students asked many questions at the lesson.
12. On Sunday he gets up at 9 o'clock.
13. Mendeleyev arranged the elements into the system according to their atomic weights.
14. He took his examination last week.
15. We carried out research at the laboratory of our University.
16. This student knows physics very well.
17. We go to the University on foot.
18. He studies many special subjects at the University.
19. There were only a few students in the laboratory.

Exercise 7. Answer the following questions.

1. Do you work or study?
2. Where do you study?
3. What University do you study at?
4. What is your speciality?
5. Where does your friend study?
6. What foreign language does your group study?
7. What subjects do you like?
8. Do you study well?
9. Where do you live?
10. When do you get up?
11. When do your lessons begin?
12. Do you go to the University on foot?
13. What subjects do you study?
14. Are you a second-year student?
15. Do you like music?
16. What is your mother?
17. Did you pass your entrance exams well?
18. Do your parents live in Tomsk?
19. Do you live far from the University?
20. How do you get to the University?
21. Why do you study at the University?

Exercise 8. Read and translate the text.

Radioactivity is invisible and inaudible, and we cannot feel it until we get too much of it and become ill. But in our nuclear age we have a very important tool, the Geiger counter, which is used for detecting radioactivity. It was invented by Hans Geiger, a German physicist, and has the ability to register cosmic rays as well as gamma-rays. Geiger counters are used for all kinds of purposes – light ones for uranium prospecting, built-in types for atomic power stations and research establishments; counters with warning signals for factory workers who deal with radioactive materials and whose hands and clothes must be checked and so on.

LESSON 4

thus	<i>таким образом</i>	yet	<i>еще</i>
then	<i>затем, тогда</i>	still	<i>все еще</i>
than	<i>чем (сравнение)</i>	also	<i>также</i>
rather than	<i>а не</i>	so	<i>так; поэтому</i>
however	<i>однако</i>	almost	<i>почти</i>
both	<i>оба, пара</i>	always	<i>всегда</i>
both ... and	<i>как ... так; и ... и</i>	recently	<i>недавно</i>
either ... or	<i>или ... или</i>	the only	<i>единственный</i>
neither ... nor	<i>ни ... ни</i>	once	<i>однажды</i>
as many as	<i>так много, как</i>	at least	<i>по крайней мере</i>
as well as	<i>так же, как</i>		

Exercise 1. Read and translate the following words.

At least, thus, then, however, still, yet, than, also, rather than, so, however, almost, both, always, both ...and, recently, either ...or, the only, neither ...nor, once, as well as, at least, as many as, thus, than, however, both ...and, neither ...nor, as well as, at least, the only, recently, so, also, still, then, rather than, either ...or, almost, once, thus.

Exercise 2. Read and translate the following words.

More, still, them, doing, also, first, both ...and, out of, so, to, either ...or, almost, such, fifth, neither ...nor, as many as, every, recently, our, as well as, the only, ninth, once, at, at least, by, why, how, how much, where, while, thus, few, then, there were, having, below, rather than, behind, as, for, since, that, us, there will be, was, what, under, of, because, with, during, because of, at least, least, most, less, might, was able to, other, their, eighteenth, although, did, yet, as well as, which, how many, without, across, whereas, its, must, around, it, however, the only.

Suffixes

Nouns	<i>-er, -or, -tion, -ance, -ence, -ity, -ment, -ist, -ness, -age, -ogy, -ics, -sure, -ture</i>
	conductor, transformer, invention, assistance, difference, activity, movement, measure, scientist, darkness, resistance, worker, operator, computer, calculation, inventor, structure
Adjectives	<i>-al, -ic, -ive, -ous, -able, -ful, -less, -y</i>
	political, periodic, positive, various, suitable, useful, useless, rainy, atmospheric, cultural, negative, classical, numerous, variable, powerful, noiseless, stony
Adverbs	<i>-ly</i>
	rapidly, greatly, widely, clearly, primarily, generally, differently, commonly, mainly, cheaply, independently, attentively
Verbs	<i>-ize, -fy, -en, -ate</i>
	memorize, classify, widen, demonstrate, realize, electrify, deepen, calculate, , optimize, modify, broaden, separate

Prefixes

<i>Re-, dis-, over-, super-, semi-, inter-, un-, in-, im-, il-, de-, counter-</i>
reproduction, overload, superman, semiconductor, international, unlimited, invisible, illegal, impossible, decode, counteraction, retell, disconnection, overproduction, semicircle, interplanetary, unstable, incorrect, demount

Exercise 3. Read and translate the following words.

Movement, statement, economist, electronics, biology, physical, religious, variable, powerful, useful, noiseless, identify, lighten, accumulate, unimportant, invisible, disconnect, organize, defreeze, reproduce, counterrevolution, supersensitive, dependence, independently, conversion, transformation, future, equipment, disadvantage, peaceful, hopeless, weightless, decompose, elementary, composition, conductivity, investigator, weightlessness, stimulate, nationalize.

Exercise 4. Fill in the blanks with the appropriate question words.

1. ... do you live?
2. ... do you go to the University?
3. ... do your friends do at the University?
4. ... books do you like to read?
5. ... many students work at the laboratory?
6. ... do you go after lessons?
7. ... is your friend's name?
8. ... students are there in your group?
9. ... did the students work at the laboratory?
- 10.... do you study at the University?
- 11.... did you study at school?
- 12.... can answer my question?
- 13.... don't you know the rule?
- 14.... were you born?
- 15.... did you go yesterday?
- 16.... did you and your friends spend your summer holidays?
- 17.... delivers lectures to you on mathematics?
- 18.... subjects do you like?
- 19.... will you do next summer?
- 20.... do you get up on weekdays?

Exercise 5. Put the general questions to the following sentences.

1. They did many interesting things last weekend.
2. He works at his report every day.
3. They will come to see you soon.
4. The students asked the lecturer many questions.
5. There is a computing centre in our University.
6. The students can take part in scientific conference.
7. Higher education is very important for a person.
8. A lab assistant shows the equipment to the students.
9. Practice accompanies theory.
- 10.Our teacher taught us to use the lab equipment.
- 11.He will deliver his report at the international conference.
- 12.They invited me to visit their new hostel.
- 13.Universities develop new methods of students' training.
- 14.The study of foreign languages is of great use for the specialists.
- 15.There are seven faculties in our University.

Exercise 6. Fill in the blanks with the appropriate prepositions.

1. Take that book and give ... me.
2. He writes ... a chalk on the blackboard.
3. Students ... our group take part in different competitions.
4. He went ... his friend ... the dean's office.
5. They know everything ... me and my friend.
6. ... lectures at the University I go ... the hostel.
7. Take your books ... your bags and put them ... the table.
8. The academic year begins ... September.
9. We have no lessons ... Sunday.
10. The academic year begins ... the first of September.
11. We will be able to complete our research ... the end of the month.
12. First-year students may take the textbooks ... the library.
13. We live ... Tomsk.
14. Usually I go ... bed ... midnight.
15. We are students ... radioengineering faculty.
16. There are some new hostels not far ... our University.
17. There are three rooms ... our flat.
18. He enters the room and sits down ... the chair ... the table.
19. ... the evening we watch TV or read books.
20. The accident happened ... night.
21. Usually I get ... the University ... bus.
22. We will graduate ... the University ... five years.
23. The course ... study lasts five years.
24. Higher education is necessary ... further development ... the country.
25. Entrance exams are held ... summer.

Exercise 7. Translate the text.

Electrical communication over a great distance was first demonstrated in 1844 by Samuel Morse, who sent a dot-dash message along a single wire between Baltimore and Washington. In later years it was demonstrated that the human voice could be electrically transmitted along wires. A transatlantic telegraph cable was completed and the first radio telegraph message was sent across the Atlantic in 1901. Transatlantic telephone calls finally became popular with the opening of the high quality 36-channel cable in 1956. Six years later the first active experimental communication satellite relayed the first live television pictures between the US and Europe.

Today a lot of communication satellites are in synchronous orbits over the Atlantic, Pacific and Indian oceans. They send telephone, television, telegraph and other signals to the ground stations all over the world.

LESSON 5

V₁ ask <i>спрашивать</i>	V₂ asked <i>спрашивал, спросил</i>	V₃ asked <i>спрошенный</i>	V_{ing} asking <i>спрашивающий</i>
write <i>писать</i>	wrote <i>писал, написал</i>	written <i>написанный</i>	writing <i>пишущий</i>

<i>Active</i>	<i>Passive</i>
Simple (Indefinite)	
V	(will) be + V_{ed/3}
V_{ed/2} делал V_(s) делаю(-ет) will V будет делать	was (were) + V_{ed/3} делалось am (is, are)+ V_{ed/3} делается will be + V_{ed/3} будет делаться
Progressive (Continuous)	
(will) be + V_{ing}	be + being+ V_{ed/3}
was (were) + V_{ing} делал am (is, are)+ V_{ing} делаю (-ет) will be + V_{ing} будет делать	was (were) + being + V_{ed/3} делалось am (is, are)+ being + V_{ed/3} делается
Perfect	
(will) have + V_{ed/3}	(will) have been + V_{ed/3}
had + V_{ed/3} сделал have (has) + V_{ed/3} сделал will have + V_{ed/3} сделает	had + been + V_{ed/3} было сделано have (has) + been +V_{ed/3} было сделано will have + been + V_{ed/3} будет сделано

Exercise 1. Put the right pronouns instead of numbers and translate into Russian.

1 was decided, 2 will be decided, 3 had decided, 4 will decide, 5 is decided, 6 has been decided, 7 will have decided, 8 decided, 9 was being decided, 10s are deciding, 11 will have been decided, 12s were decided, 13 has decided, 14 decides, 15s are being decided.

Exercise 2. Put the right pronouns instead of numbers and translate into Russian.

1 have read, 2s were being read, 3 is reading, 4 has been read, 5 will be read, 6 reads, 7 read, 8 will have been read, 9s were reading, 10 is read.

Exercise 3. Put the right pronouns instead of numbers and translate into Russian.

1 have been written, 2 wrote, 3 was writing, 4 have written, 5 writes, 6 will be written, 7 were writing, 8 is being written, 9 will have written, 10 will write.

Exercise 4. Put the right pronouns instead of numbers and translate into Russian.

1 calculate, 2s are being calculated, 3 calculated, 4 will have been calculated, 5 will be calculating, 6s are calculated, 7 calculates, 8 has calculated, 9 will calculate, 10 will have calculated, 11 was calculated, 12s are calculating, 13 calculate, 14s have calculated, 15 is being calculated.

Exercise 5. Read and translate the following word-groups.

Scientists are developing, they were obtaining, the device was produced, a new radio set was demonstrated, the results are being calculated, the scientist was using, the student is measuring, she has read, the methods have been developed, the experiment has shown, the phenomenon was studied, the problem has been solved, the invention has influenced, physics is studying, the operation was being controlled, the scientist discovered, the observation shows, the current is being rectified, the energy has been converted, the radio is broadcasting, the data will have been obtained, the new device will have been produced, the distance has been measured, the signal was amplified, the student used, the researcher invented.

Exercise 6. Fill in the blanks with the words given in the right column.

- | | |
|--|----------------|
| 1. A new experiment in physics ... made in our laboratory now. | was |
| 2. When I came in the last student ... examined. | will have been |
| 3. New equipment ... installed in our University last week. | were |
| 4. These electronic devices ... produced by the end of the year. | is being |
| 5. The scientists ... working at the design for two months. | are |
| 6. Diodes ... used as detectors and rectifiers. | will be |
| 7. The results of their research ... discussed next week. | was being |

Exercise 7. Read and translate the following sentences.

1. The output of the factory will be growing during the next decade.
2. Scientists are using the energy of atom in various spheres of life.
3. The engineers were attaching the wires to the devices when I came in.

4. When we listen to a radio program we use the rays that are called radio waves.
5. The scientist was solving a new problem when we visited the laboratory last week.
6. My friend is writing an article for the newspaper.
7. The student was carrying out the experiment for twenty minutes.
8. Molecules in gas are constantly moving.
9. The electron is circling in an orbit around a nucleus.
10. He understood the text after he had read it again.
11. He will have finished his work by the end of the week.
12. The operator will have recorded the data before you come.
13. I have not seen him since he graduated from the university.
14. We will have completed our experiments by the next month.
15. They have accepted the scientist's suggestion.
16. The apparatus used in our research has been described recently.
17. Many difficulties had been overcome before the researcher succeeded in his work.
18. After the new device had been tested it was installed in our laboratory.
19. The construction of this television center will have been completed soon.
20. We analyzed the data that have been obtained by our investigators.

Exercise 8. Read and translate the text.

The kind of ray that mankind has known for the longest time is light. It helps us to see the objects that surround us, when the objects reflect the light into our eyes. As our eyes can detect light, we call it a visible ray. The other rays are invisible.

We find three types of invisible rays in use in our homes. When we listen to a radio program, we are using the rays that are called radio waves. When we cook a meal on an electric cooker, we are using infrared rays, sometimes called heat waves. When we sit under sun-tan lamp, we are using ultraviolet rays.

We meet the other three types of rays outside the home. Inside the hospital we will find X-rays that are used for taking pictures of the insides of our body. At airports everywhere we will find microwaves that are used with radar equipment to detect planes in the air or guide them to land. Also in hospitals we find gamma rays used as invisible bullets to kill cancer cells.

These seven types of rays are all electromagnetic waves. But they are different from each other in their frequency and their wavelength. The distance that the wave moves during the time that it takes for one complete cycle of vibration is called the wavelength. The frequency is the number of cycles in a second. Notice that radio waves are the longest of the electromagnetic waves and have the lowest frequency.

LESSON 6

Revising Tenses

Exercise 1. Put the correct pronouns instead of numbers and translate into Russian.

1 have divided, 2 will divide, 3 will have been divided, 4s were divided, 5 is being divided, 6 is dividing, 7s are divided, 8 divided, 9 had divided, 10 will be divided, 11s were dividing, 12 will divide, 13 divides, 14 has divided, 15 will have divided.

Exercise 2. Read and translate the following sentences.

I. 1. We were catching. 2. I will be caught. 3. He has caught. 4. I am caught. 5. She is catching. 6. He will catch. 7. I was being caught. 8. She has been caught. 9. You will have caught. 10. They will be caught. 11. She caught. 12. He is catching.

II. 1. He teaches. 2. I was taught. 3. She will be taught. 4. They had taught. 5. I will teach. 6. She is taught. 7. They have been taught. 8. He will have taught. 9. We taught. 10. He was being taught. 11. We were teaching. 12. She will have been taught. 13. They were taught. 14. He has taught. 15. They are teaching.

Exercise 3. Read and translate the following word-groups.

The century began, they are obtaining, the satellite was on its orbit, a new radio set was demonstrated, new results are being obtained, the methods have been developed, the observation has shown, the scientist was applying, the question has been solved, the error will have been determined, the property differed, the engineer is measuring, the student has written, the concept explains, the energy had been converted, the discovery depended, the particle will be divided, physics is studying, power plants were being controlled, the data will be tested.

Exercise 4. Read and translate the following sentences.

1. While the experiment was being carried out, nobody left the laboratory.
2. A new type of computing equipment is being produced at our plant.
3. At present scientific work is being done mostly by large groups of researchers.
4. For twenty minutes the air in the laboratory was being purified by two ventilators.
5. The solar battery is converting the energy of sun rays directly into electric energy.
6. The experiment was being carried out under low pressure.

7. For a long time the electronic devices were being used for control.
8. Scientists and engineers are developing new types of electronic and cybernetic devices.
9. We were looking for a more simple method of solution but couldn't find it.
10. The engineers will discuss the advantages of this new system.
11. Our laboratory is housed in an old building.
12. In our country great progress has been achieved in developing all branches of science and engineering.
13. Many different devices have been produced in order to improve the quality of communication.
14. The information has been based on the data received from a computer.
15. Much research has been carried out in order to establish the causes of this phenomenon.
16. This question has already been discussed at the scientific conference.
17. By the end of the year various semiconductor devices will have been produced.
18. That equipment had been repaired before you came.
19. This text has just been translated.
20. Mendeleev's periodic law has been accepted as a universal law of nature.

Exercise 5. Translate the following sentences from Russian into English.

1. Опыты показывают, что в металлах есть много свободных электронов.
2. Электрический ток в металлах представляет собой движение свободных электронов.
3. Ученые используют лазер в промышленности и медицине.
4. Протон имеет античастицу, которая несет отрицательный заряд.
5. Ученые достигли больших успехов в области развития электроники.
6. Электроника используется в промышленности для автоматизации и управления.
7. Электронные приборы помогают решать сложные проблемы.
8. На конференции будет обсуждаться проблема использования лазеров для связи.
9. Электронные приборы контролируют работу спутников и автоматических станций.
10. Ученые заметили, что электрический ток создает магнитное поле.
11. Через неделю они будут испытывать машину, сконструированную нашими инженерами.
12. Звук – это колебания среды, в которой он распространяется.
13. Ученые провели много экспериментов по применению ультразвука в промышленности.

Exercise 6. Translate the text.

Radio waves are the longest waves in the family of electromagnetic waves. Their wavelengths range from about three hundredth of a centimeter to about 300 kilometers. Radio broadcasts today are made by two different methods known as AM (amplitude modulation) and FM (frequency modulation). The frequencies of the waves are expressed in kilocycles or megacycles.

Microwaves are the smallest radio waves. In the spectrum of electromagnetic waves they lie between infrared rays and the long radio waves. The shortest microwaves have a wavelength of about three hundredth of a centimeter and a frequency of one million megacycles. The longest microwaves have a wavelength of about three meters and a frequency of one hundred megacycles.

The first microwaves were the two-foot waves produced by Heinrich Hertz. But they were not widely used in practice because long waves were easier to produce and send out over long distances. Scientists returned to the use of short waves during World War II. They tried to solve a problem “How can you detect an approaching enemy plane while it is far away?” The answer to the problem was to send a beam of radio waves. Long radio waves could not be used for this purpose because they fan out too quickly from the antenna. Very short waves were necessary for the work of radar system. So new transmitters and receivers were designed to make and use microwaves.

Exercise 7. Answer the questions to the text.

1. What is the wavelength of radio waves?
2. What are microwaves?
3. Where do they lie in the spectrum of electromagnetic waves?
4. What wavelength do they have?
5. Who produced the first microwaves?
6. What is Hertz?
7. Can we use long waves to detect a plane? Why?
8. Why did scientists use short waves during World War II?

LESSON 7

Participle I, Participle II (Simple forms)

Exercise 1. Read and translate the following sentences.

1. The students studying at the universities passed entrance exams well.
2. The subjects studied in the first two years are very important for future engineers.
3. The lecture delivered by the professor was on new methods of technology.
4. The man delivering this lecture is the dean of our faculty.
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 next week.
7. The attention paid to the study of fundamental subjects is great.
8. Students interested in computer engineering enter technological universities.
9. The number of specialists connected with new branches of science and engineering grows every year.

Exercise 2. Read and translate the following sentences.

1. More than one hundred years have passed since the day when A.S. Popov demonstrated his radio receiver.
2. The problem of radioactivity is very important for our research.
3. Since you were not at the meeting, we took the decision without you.
4. We must be very attentive in experimenting for the accuracy is necessary here.
5. I haven't seen my friend for more than five years.
6. The discovery of atomic energy is as important as the discovery of fire.
7. Scientists couldn't discover the secret of the atom for a long time.
8. Franklin is respected both as a scientist and a progressive political leader.
9. As we know there is neither air nor water in any part of the Moon.
10. The laboratory is the place where experiments as well as scientific research may be carried out.
11. After the international conference on ecology, they began working at environmental problems.
12. Electricity has replaced other sources of energy as it offers improved service and reduced cost.
13. Electricity is widely used in industry as well as in our houses.
14. It was necessary to lay cables across the Atlantic Ocean as there was no radio or satellites at that time.
15. Because of the earth's rotation there are days and nights on the earth.
16. He was the only person who could help us to solve this problem.

17. They were making their experiment for three hours.
18. They can't use this device as it is out of date.
19. They couldn't start their experiment for the equipment was not prepared.
20. We use transistors since they are smaller and lighter.

Exercise 3. Choose the correct variant.

1. The service area of this transmitter (*ограничивалась*) to a radius of 25 to 50 miles.
 - a) is limited
 - b) was to limit
 - c) was limited
 - d) limited

2. The signal received by the antenna (*будет передаваться*) to the radio receiver.
 - a) will transmit
 - b) is transmitted
 - c) will be transmitted
 - d) transmitted

3. Radio frequency output of the first stage (*смешивается*) with the output of the local oscillator.
 - a) is to be mixed
 - b) mixed
 - c) will be mixed
 - d) is mixed

4. The video signal (*необходимо усилить*) by several stages of video amplification.
 - a) is to be amplified
 - b) was amplified
 - c) to be amplified
 - d) will amplify

5. A wide range of functions (*выполняется*) by the laser.
 - a) perform
 - b) is performed
 - c) performed
 - d) is to perform

6. Transistors (*делаются*) from germanium or silicon.
 - a) to make
 - b) are made
 - c) were made
 - d) make

7. These programs (*выполняют*) logical and mathematical operations.
- are performed
 - perform
 - will perform
 - are to perform

Exercise 4. Read and translate the following sentences.

- Some other planets of our solar system are being investigated by our scientists.
- Much preparatory work had been done before they could obtain satisfactory results.
- A report on different kinds of radiation will have been prepared by the next scientific conference.
- The new equipment had been carefully tested before it was used in the plant.
- Two wires were placed parallel to each other and the current was passed through one of them in order to find a current in the other.
- These phenomena have already been investigated and they will be discussed later.
- We used different types of measuring devices in our research.
- By the end of the year all the experiments necessary for the completion of our research will have been made.
- Automation is being widely used in space research.
- Satellites are equipped with solar batteries and various accurate instruments.
- Experiments are carried out in many laboratories in order to increase the efficiency of energy conversion.
- In our scientific age great progress is being made in the study of semiconductor devices.
- Electronics is becoming very important to engineers working in various branches of industry.
- We must study the design of these units in order to understand them and to learn to control them.

Exercise 5. Translate the sentences from Russian into English.

- Я не видел его вчера, но видел его друга.
- На прошлой неделе её навестили её друзья.
- Я хочу показать им их новую лабораторию.
- Преподаватель объяснил им их ошибки.
- Мы любим свой университет. Он новый и красивый. Его выпускники работают во многих городах страны.
- Она помогает своему брату по физике, а он помогает ей по истории.
- Я не вижу свою книгу. Куда я положил её?
- Она взяла его портфель и отдала его его товарищу.

9. Мы проводили свои исследования в лаборатории.
10. Университетская газета писала о них и об их достижениях.
11. У нас не будет лекций вечером.
12. В следующем месяце мы переедем в новую квартиру, и я буду ходить в институт пешком.

Exercise 6. Read and translate the following sentences paying attention to modal verbs.

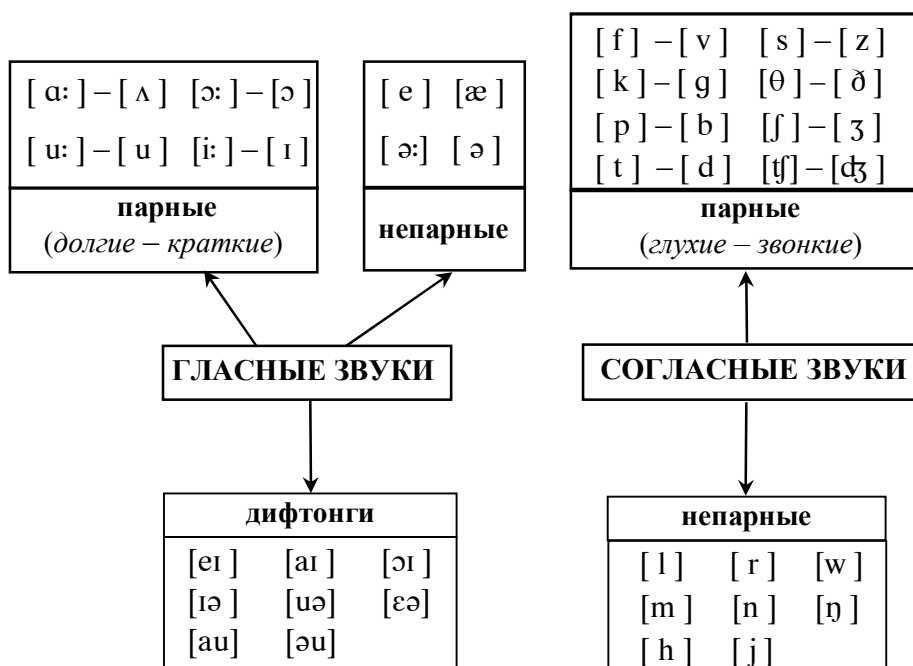
1. Electrons can be removed by the application of a very high electric field.
2. Although the methods by which electrons may be obtained have been considered the remaining two questions have still to be answered.
3. A stream of electrons may be regarded as a large number of small particles moving in the same direction.
4. In order to overcome this limitation plasma generated by a radio frequency oscillator could be used as the source of helium ions.
5. These materials can reflect light well.
6. Engineers had to prepare detailed drawing according to which a machine could be made.
7. In many cases man-made satellites may be used instead of natural ones.
8. They will not be able to continue their work because there are not enough data.
9. Students may consult dictionaries while translating the text.
10. May we use the data obtained by the other group?
11. A transformer can not be called a machine for it has no moving parts.
12. You won't be able to control the temperature all the time.
13. A good engineer must know many other things besides the theoretical knowledge he gets at the university.
14. The flights have proved that a man can live and work in space.
15. We are to take certain steps to reduce the weight of the mechanical part.
16. Nuclear energy may be used to light and heat our houses.
17. Vacuum tubes are able to convert alternating current into direct current.
18. Very difficult calculations in mathematics and electrical engineering must be solved by computers.
19. Without a computer scientists will not be able to solve complicated problems.
20. Scientists of different countries must cooperate in their research and peaceful application of their discoveries.
21. You must take into consideration all the advantages and disadvantages of this device for the future work.
22. Our work must have been completed by the next conference.
23. Some day atomic energy might have been used to control the weather on the planet.

ПРИЛОЖЕНИЕ 1

Английский алфавит

A a	[eɪ]	N n	[en]
B b	[bi:]	O o	[əu]
C c	[si:]	P p	[pi:]
D d	[di:]	Q q	[kju:]
E e	[i:]	R r	[ɑ:]
F f	[ef]	S s	[es]
G g	[dʒi:]	T t	[ti:]
H h	[eɪf]	U u	[ju:]
I i	[aɪ]	V v	[vi:]
J j	[dʒeɪ]	W w	[ˈdʌblju:]
K k	[keɪ]	X x	[eks]
L l	[el]	Y y	[waɪ]
M m	[em]	Z z	[zed]

Знаки транскрипции



Правила чтения

Тип слога	А а	Е е	І і	О о	U u	Y y
Открытый слог (оканчивается на гласную или е немую)	[eɪ] <i>case</i>	[ɪ] <i>she</i>	[aɪ] <i>line</i>	[əʊ] <i>zone</i>	[juː] <i>rude</i>	[aɪ] <i>my</i>
Закрытый слог (оканчивается на согласную)	[æ] <i>tank</i>	[e] <i>bet</i>	[ɪ] <i>bit</i>	[ɔ] <i>lot</i>	[ʌ] <i>cut</i>	[ɪ] <i>myth</i>
Гласная + r и гласная + r + согласная	[aː] <i>car</i> <i>park</i>	[əː] <i>her</i> <i>term</i>	[əː] <i>sir</i> <i>third</i>	[ɔː] <i>or</i> <i>born</i>	[əː] <i>fur</i> <i>burn</i>	[əː] <i>Cyrd</i>
Гласная + r + гласная	[ɛə] <i>vary</i>	[ɪə] <i>here</i>	[aɪə] <i>tire</i>	[ɔː] <i>story</i>	[juə] <i>pure</i>	[aɪə] <i>tyre</i>

ПРИЛОЖЕНИЕ 2

Основные способы словообразования Аффиксация (суффиксация и префиксация) Основные суффиксы существительных

Суффиксы	Примеры	Перевод
-er	to read – reader	читать – читатель
-or	to elect – elector	избирать – избиратель
-ant	to assist – assistant	помогать – помощник
-ent	to study – student	изучать – студент
-ian	academy – academician	академия – академик
-ist	to type – typist	печатать – машинистка
-tion	to connect – connection	соединять – соединение
-ation	to organize – organization	организовывать – организация
-sion	to collide – collision	сталкиваться – столкновение
-ssion	to admit – admission	допускать – допущение
-age	to clear – clearance	очищать – очистка
-ment	to fulfil – fulfilment	выполнять – выполнение
-ure	to press – pressure	давить – давление
-ance	to appear – appearance	появляться – появление
-ence	to depend – dependence	зависеть – зависимость
-ing	to begin – beginning	начинать – начало
-ness	dark – darkness	темный – темнота
-ity	active – activity	активный – активность
-th	wide – width	широкий – ширина
-dom	free – freedom	свободный – свобода
-ism	real – realism	действительный – реализм
-hood	child – childhood	ребенок – детство
-ship	friend – friendship	друг – дружба

Основные суффиксы прилагательных

Суффиксы	Примеры	Перевод
-ant -ent -ive	to tolerate – tolerant to differ – different to act – active	терпеть – терпимый различаться – непохожий, другой, отличный (от) действовать – активный
-ful -al	use – useful centre – central	польза – полезный центр – центральный
-ic -ous	history – historic advantage – advantageous	история – исторический преимущество – выгодный
-y -ly	dirt – dirty day – daily	грязь – грязный день – ежедневный
-less (переводится приставкой без-, с-)	noise – noiseless	шум – бесшумный
-ish	old – oldish	старый – староватый

Основные суффиксы глаголов

Суффиксы	Примеры	Перевод
-en -ify	strength – to strengthen simple – to simplify	сила – усиливать простой – упрощать
-ize -ate	real – to realize active – activate	настоящий – осуществлять активный – активизировать

1.1. Form nouns adding the suffixes *-er, -or, -tion* to the given words.

To operate, to receive, to produce, to transmit, to invent, to discover, to visit, to convert, to regulate, to accumulate, to react, to use, to oscillate, to record, insulate, receive, accelerate, communicate, act, revolt, classify, conduct, transmit, investigate, apply, emit.

1.2. Form nouns adding the suffixes **-ment** or **-ity** to the given words.

To develop, to achieve, active, able, complex, to move, dense, electric, to measure, to improve, to manage, intense, intense, conductive, capable, to require, special, flexible.

1.3. Form adjectives adding the suffixes **-ant**, **-ent**, **-ive**, **-ful**, **-al**, **-ic**, **-ous** to the given words.

Economics, collection, industry, importance, electricity, illustration, technology, physics, difference, history, advantage, experiment.

1.4. Form nouns adding the suffixes **a) -less**; **b) -ness**. Translate the words.

- a. Home, power, hope, sense, weight, shape, use, wire, noise, help, harm, life.
- b. Effective, useful, bright, soft, thick, weightless, shapeless, empty.

1.5. Complete the table.

Verb	Noun	Adjective/ Participle
reflect	reflection	reflecting
manufacture	...	manufactured
...	...	long
...	preparation	...
magnetize
...	...	reproduced
...	track	...
amplify
...	...	driven
convert
feed	...	fed
...	continuation	...
respond

1.6. Read and translate the derivatives paying attention to the suffixes.

1. **to transform** – transformer, transformation
2. **to demonstrate** – demonstration, demonstrative
3. **to calculate** – calculation, calculator
4. **to add** – additional, addition
5. **to differ** – different, difference, differential
6. **to compute** – computer, computation
7. **to use** – usage, user

1.7. Translate the following words. Point out verbs.

1. memory	memorize	memorial
2. wide	width	widen
3. separation	separable	separate
4. realize	real	reality
5. creation	creative	create
6. classify	classification	classical
7. action	active	activate

1.8. Give the English equivalents of the words in bold.

1. **устанавливать** – installment, installation, install
2. **стабилизировать** – stabilizer, stability, stabilize
3. **упрощать** – simplify, simple, simplification
4. **регулировать** – regular, regulation, regulate
5. **генерировать** – generation, generate, general

1.9. Read the following words and decide to what parts of speech they belong to.

Information, digital, television, conversation, conventional, protection, carrier, typically, inexpensive, versatility, data, relatively, conduction, equipment, interference, resistance, regenerator.

1.10. Read and translate the words paying attention to the suffixes.

Greatly, lecturer, atmospheric, successful, improvement, inventor, radiation, equipment, economic, powerful, development, operation, atomic, agreement, regulation, instruction, communication, generation, separately, production, industrial, researcher, radioactivity, measurement, interaction, elimination, seriously, symbolic, ecological, organizer, possible, differently, impossibility, rapidly, importance, technologically, economist, automatically, universal, manufacturer, productivity, operation, substitution, greatly, increasingly, dependent, independence, independently, correspondence, resistive, intensity, simplify, classification, magnetize, diversity, replacement, affectively, variable, variety, completely, impressive, conversation, conventional, carrier, typically, addition, equipment.

1.11. Form nouns, adjectives or adverbs and fill in the blanks. Read and translate the sentences.

PHYSICS

1. It is ... impossible to be in two places at once.
2. ... is an expert dealing with matter and energy.
3. Mechanical laws and Newtonian ... are very important for creating virtual systems.
4. The equivalent of clip art for virtual reality designers might be ... systems.

POSSIBILITY

5. What will make the virtual reality design system of tomorrow ...?
6. Is there any ... of your taking part in virtual reality conference this year?
7. If we throw an object, it flies across the room, ... hitting another object and causing a complex chain of events as objects crash into each other.

SUCCESS

8. Virtual reality can have great ... in many ways, especially in experimenting.
9. Recent ... tests of the world's largest simulator enable scientists to do research in education, management and industry.
10. Astronauts have ... simulated Space Shuttle landing.

POTENTIAL

11. Virtual laboratory helps researchers simulate ... complicated flight situations.
12. Our country has great ... raw resources.
13. It has not realized its full ... yet.

Префиксы с отрицательным значением

Префиксы	Примеры	Перевод
un- { не- без (с)-	known – unknown limited – unlimited	известный – неизвестный ограниченный – безграничный
il- im- { не- in- без (с)- ir-	logical – illogical polite – impolite accuracy – inaccuracy regular – irregular	логичный – нелогичный вежливый – невежливый точность – неточность регулярный – нерегулярный
non- { не- без- (с)-	conductor – non-conductor	проводник – непроводник (изолятор)
dis- { раз- не-	to connect – to disconnect ability – disability	соединять – разъединять способность – неспособность
anti- анти-	war – antiwar	военный – антивоенный
mis- означает «неверно»	to print – to misprint	печатать – сделать опечатку

Префиксы с разными значениями

Префиксы	Примеры	Перевод
super- сверх-	man – superman	человек (мужчина) – сверхчеловек (супермен)
over- пере-, над-	to heat – to overheat	нагревать – перегревать
sub- ниже-, под- и др.	dean – subdean system – subsystem	декан – заместитель декана система – подсистема
en- (для образования глагола)	large – to enlarge	большой – увеличить
post- после- pre- до- заранее-	war – post(-)war heat – preheat	война – послевоенный нагреть – предварительно нагреть

re- снова, еще раз	to write – to rewrite to use – to reuse to elect – to re-elect (пишется через дефис)	писать – переписывать использовать – снова использовать избирать – переизбирать
semi- полу-	conductor – semiconductor	проводник – полупроводник
inter- меж(ду)- взаимо-	change – interchange	обмен – взаимообмен

1.12. Form adjectives adding the prefix un- to the following adjectives and translate them.

Complicate, completed, human, stable, limited, like, satisfactory, natural, discovered, important.

1.13. Form words with negative prefixes un-, in-, ir-, il-, dis-, non-.

Importance, reliability, flexibility, ability, easy, expensive, advantage, relevant, conductor, suitable, regular, logical, connect, legal, print, limited.

1.14. Form verbs using prefixes en-, re-, dis-, mis-, pre-, over-, under-, de-.

Large, case, arrange, tell, agree, appear, understand, determine, load, estimate, stabilize, heat.

1.15. Point out the words with negative prefixes.

- | | | |
|---------------------|-------------|-------------------|
| 1. semiconductor | recharge | non-conductive |
| 2. misinform | interchange | overheat |
| 3. misunderstanding | submarine | enlarge |
| 4. reuse | non-stop | important |
| 5. ultrasonic | antifreeze | superconductivity |
| 5. postwar | inexpensive | enlarge |