ГЕОГРАФИЯ

UNIT I

GEOGRAPHY

Section I. TOPICAL VOCABULARY

	Index
accurate [ˈækjurɪt] *a* точный, правильный	C
affect [əˈfekt] *v* воздействовать	A
age [eɪdʒ] *n* возраст	B
amount [əˈmaunt] *n* количество	B
ancient [eɪnʃənt] *a* древний, старый	B, C, D
angle [æŋgl] *n* угол	D
annual [ˈænjuəl] *a* ежегодный, годовой	B
approximately [əˈprɔksɪmɪtlɪ] *adv* приблизительно, почти	D, T_1
area [ɛərɪə] *n* площадь, пространство	B
average [ˈævərɪdʒ] *a* средний	T_2
axis (pl. axes) [ˈæksɪs] *n* ось	B, T_1
basalt [ˈbæsɔ:lt] *n* базальт	B
body [bɔdɪ] *n* тело	D, T_1, T_2
heavenly body небесное тело	B, C
bottom [ˈbɔtəm] *n* дно (моря, реки и т.п.)	B, T_2
Cancer [ˈkænsə] *n* Рак (созвездие)	B
tropic of Cancer тропик Рака	
Capricorn [ˈkæprɪkɔn] *n* Козерог (созвездие)	B
tropic of Capricorn тропик Козерога	
carbon dioxide [ˈkɑ:bən daɪˈɔksaɪd] *n* углекислый газ	T_2
cause [kɔ:z] *v* вызывать, причинять	A, B
cause [kɔ:z] *n* причина	A
circle [sə:kl] *n* круг, окружность	A, D, T_1
circular [ˈsə:kjulə] *a* круглый	C
circumference [səˈkʌmfərəns] *n* окружность	D
concern [kənˈsə:n] *v* касаться, иметь отношение	
to be concerned with *v* заниматься, интересоваться	A
considerable [kənˈsɪdərəbl] *a* значительный, большой	T_2
core [kɔ:] *n* ядро, центр	T_1
deal with (dealt, dealt) [di:l, delt] *v* иметь дело, рассматривать	A
decrease [dɪˈkri:s] *v* уменьшать(ся)	T1
definition [defɪˈnɪʃən] *n* определение	A
degree [dɪˈgri:] *n* градус; степень	T_1
denudation [dɪnju:ˈdeɪʃən] *n* денудация, эрозия	B
derive from [dɪˈraɪv] *v* происходить	A
describe [dɪsˈkraɪb] *v* описывать, изображать	A
description [dɪsˈkrɪpʃən] *n* описание, изображение	A
descriptive [dɪsˈkrɪptɪv] *a* описательный	A
determine [dɪˈtə:mɪn] *v* определять, устанавливать	A
distribution [dɪstrɪˈbju:ʃən] *n* распределение	A

diversified [daɪˈvə:sɪfaɪd] *a* разнообразный	C
eclipse [ɪˈklɪps] *n* затмение	C
emerge [ɪˈmə:dʒ] *v* появляться	A
environment [ɪnˈvaɪərənmənt] *n* окружающая среда	A
estimate [ˈestɪmeɪt] *v* оценивать; подсчитывать приблизительно	D
estimation [estɪˈmeɪʃən] *n* оценка; подсчет, вычисление	A
evaporation [ɪˌvæpəˈreɪʃən] *n* испарение	T_2
event [ɪˈvent] *n* событие	A
eventually [ɪˈventʃəlɪ] *adv* со временем, в конечном счете, в конце концов	A
evidence [ˈevɪdəns] *n* очевидность, основание	B
evolve [ɪvɔlv] *v* развиваться	A
exact [ɪgˈzækt] *n* точный, строгий	A
exert [ɪgˈzə:t] *v* оказывать давление, влиять	T_2
feature [ˈfi:tʃə] *n* особенность, характерная черта	A
physical features рельеф местности	
flat [flæt] *a* плоский, ровный	C
flow [flou] *v* течь, литься, струиться	C
grain [greɪn] *n* зерно; крупинка; мельчайшая частица	T_2
gradually [ˈgrædjuəlɪ] *adv* постепенно, понемногу	C
gravity [grævɪtɪ] *n* сила тяжести, тяготение	T_1
gravitational law [lɔ:] закон тяготения	T_1
incline [ɪnˈklaɪn] *v* наклонять(ся)	B
include [ɪnˈklu:d] *v* выключать, заключать	A, B, T_1
increase [ɪnˈkri:s] *v* возрастать, увеличивать(ся)	A
inquiry [ɪnˈkwaɪərɪ] *n* исследование	A
inquisitiveness [ɪnˈkwɪzɪtɪvnɪs] *n* любознательность	A
interaction [ɪntəˈrækʃən] *n* взаимодействие	T_1
invention [ɪnˈvenʃən] *n* изобретение	T_1
investigate [ɪnˈvestɪgeɪt] *v* исследовать, изучать	A
landmark [ˈlændmɑ:k] *n* веха, поворотный пункт (в истории)	A
landscape [ˈlændskeɪp] *n* ландшафт, пейзаж	A
latitude [ˈlætɪtju:d] *n* широта (геогр.)	C
layer [ˈleɪə] *n* слой, пласт	B, T_2
level [ˈlevl] *n* уровень, ступень	T_2
sea level *n* уровень моря	
man-made [ˈmænmeɪd] *a* искусственный, созданный руками человека	A
mean (meant, meant) [mi:n, ment] *v* значить, означать	A, D
middle [ˈmɪdl] *a* средний	T_1
measure [ˈmeʒə] *v* измерять, мерить	A, D, T_2
measurement [meʒəmənt] *n* измерение	D
motion [ˈmouʃən] *n* движение	B
movement [ˈmu:vmənt] *n* движение, перемещение	A, B, T_1
origin [ˈɔrɪdʒɪn] *n* происхождение	A
particle [pɑ:tɪkl] *n* частица; крупица	T_2
path [pɑ:θ] *n* путь, тропа	B, T_2
plein [pleɪn] *n* плоскость	B, T_1
prevalent [ˈprevələnt] *a* преобладающий, превалирующий	T_1
push [puʃ] *v* толкать, продвигать	T_2
range [reɪndʒ] *v* колебаться в известных пределах	T_1, T_2

rare [reə] *a* редкий, разреженный	T_2
rate [reɪt] *n* темп, скорость	T_2
ray [reɪ] *n* луч	B, D
relate [rɪ'leɪt] *v* иметь отношение	B
result in [rɪ'zʌlt] *v* иметь результатом	A
revolve [rɪ'vɔlv] *v* вращаться (вокруг солнца)	B, T_1
rotate [rou'teɪt] *v* вращаться (вокруг оси)	B, T_1
sandstone ['sændstoun] *n* песчаник	B
scatter ['skætə] *v* рассеивать, разбрасывать	T_2
sediment ['sedɪment] *n* осадок; осадочная порода, отложение	B
sedimentary [sedɪ'mentərɪ] *n* осадочный	B
shadow ['ʃædou] *n* тень	C
to cast a shadow *v* отбрасывать тень	
shale [ʃeɪl] *n* глинистый сланец	B
shape [ʃeɪp] *n* форма, очертание	A, D
size [saɪz] *n* размер, величина	A, D
slanting [slɑ:ntɪŋ] *a* косой, наклонный	B, D
soil [sɔɪl] *n* почва, земля	A, T_2
soil science *n* почвоведение	
solid ['sɔlɪd] *a* твердый (не жидкий, не газообразный)	T_2
species ['spi:ʃɪz] (pl. без измен.) *n* вид (биол.)	A
steep [sti:p] *a* крутой	A
surface ['sə:fɪs] *n* поверхность	A, B, C T_1, T_2
suspended [sə'spendɪd] *a* подвешенный, висячий	C
trace [treɪs] *n* след	T_1
universe ['ju:nɪvə:s] *n* мир, вселенная, космос	B, C
vapour ['veɪpə] *n* пар, пары	T_2
variable ['veərɪəbl] *a* изменчивый, непостоянный	T_2
various ['veərɪəs] *a* различный, разный	A
vary ['veərɪ] *v* менять(ся), изменять(ся)	T_2
weigh [weɪ] *v* весить, иметь вес	D
weight [weɪt] *n* вес, масса	T_2
widespread ['waɪdspred] *a* широко распространенный	B

Section II. READING MATERIAL

TEXT A. GEOGRAPHY

Task: *read the text; translate it into Russian in written form.*

The word "geography" is derived from Greek words "geo" meaning the "earth" and "graphy" meaning "description". So the simplest definition of geography would be the "description of the earth". In earlier times geography was purely descriptive and it was concerned mainly with listing facts about places and peoples. Because some facts are of interest in themselves we do have to know a large number of facts in order to understand modern geography.

One of the most important landmarks in the history of geography is 1859 and this is when Charles Darwin published his well-known book "Origin of Species". He suggested that all forms of life had evolved from earlier and more primitive forms. At that particular time this was an absolutely revolutionary idea and it caused a great stir in scientific circles. It set people thinking, questioning and experimenting. People up to that time had been content to learn that kangaroos lived in Australia or the Dead Sea was salty and so on and so forth. Now they wanted to know why. Geographers began to think of the causes of things and events. They started to know the effects of conditions and happenings upon the earth. This inquisitiveness led eventually to the growth of what we could call causes of geography, that is geography which emphasizes the study of the causes of the events and things that we see. So modern geography not only describes the surface of the earth and various natural and man-made features on the earth, it also investigates and correlates and organizes and rationalizes the phenomena on the earth.

Modern geography is the exact and organized knowledge of the distribution of phenomena on the surface of the Earth. The subject of geography describes the earth's surface – its physical features, climates, vegetation, soils, products, peoples, etc. It is connected with other specialized sciences, such as geology, meteorology, astronomy and biology.

Geography is divided into systematic fields and regional specializations, which can be grouped under three main headings: physical geography, human geography and regional geography. There is a number of subdivisions, such as mathematical geography, which deals with the shape, size and movements of the earth; political geography, which studies the world's political divisions; economic geography deals with estimation of the environment and resources, distribution of economy and population and historical geography.

The principal activities of the physical geographer include observing, measuring and describing the surface of the Earth. The growing complexity of geographic inquiry has resulted in increased specialization within the field. The principal branches of physical geography are geomorphology, climatology, biogeography and soil geography. As human activity has become more able to affect the landscape and ecology of the world, two more branches have emerged: resource management and environmental studies.

EXERCISES

Ex. 1. Read the international words and guess their meaning. Mind the stress.

ˈmodern	geˈography	defiˈnition
ˈproduct	geˈology	vegeˈtation
ˈhuman	astˈronomy	systeˈmatic
ˈprincipal	acˈtivity	geoˈgraphic
ˈprimitive	compˈlexity	ecoˈnomic
ˈregional	descˈriptive	matheˈmatical
ˈphysical	pheˈnomena	climaˈtology
ˈclimate	reˈsources	revoˈlutionary

Ex. 2. Memorize the following pairs of derivatives.

V → N	N → N
describe – description	geography – geographer
define – definition	astronomy – astronomer
suggest – suggestion	ecology – ecologist
investigate – investigation	science – scientist
correlate – correlation	form – formation
divide – division	product – production

N → Adj

geography – geographical
environment – environmental
description – descriptive
event – eventful
scientist – scientific
climate – climatic

Ex. 3. Transform as in the models.

Model A: to list facts – the listing of facts

to describe the surface of the earth, to investigate the phenomena, to publish the book, to evolve from primitive forms

Model B: resource management – to manage the resources

resource estimation, economy distribution, regional geography specialization, environmental studies

Model C: the surface of the earth – the earth('s) surface

the crust of the earth, the orbit of the earth, the growth of economy, the observation of weather, the political divisions of the world

Ex. 4. Match English and Russian equivalents.

1. exact knowledge	a. важная веха
2. the earth's surface	b. причины явлений и событий
3. evolution from primitive forms	c. точная наука
4. an important landmark	d. особенности природного и антропогенного характера
5. causes of things and events	e. поверхность земли
6. natural and man-made features	f. развитие из простых форм
7. origin of species	g. происходить
8. to derive from	h. происхождение видов

Ex. 5. Choose the right word or word-combination.

1. Early geography was purely ...
   a) imaginative b) descriptive c) rational
2. Geography of earlier times was mainly concerned with ...
   a) distribution of population b) travellers' reports
   c) listing facts about places and peoples
3. Charles Darwin's book ... caused a great stir in scientific circles.
   a) "Descent of Man" b) "Origin of Species"
   c) "Geography of the World"
4. After the publication of Darwin's book geographers began to think of ...
   a) the causes of things and events b) the environment
   c) complexity of geographical facts
5. Geography ... systematic fields and regional specializations.
   a) is concerned with b) is connected with c) is divided into

Ex. 6. Complete the sentences.

1. Early geography was concerned mainly with ... .
2. The simplest definition of "geography" is ... .
3. The publication of Darwin's book "Origin of Species" was ... .
4. Darwin's idea of the evolution of life from primitive forms made ... .
5. Modern geography not only describes the surface of the earth, but it also ... .
6. The growing complexity of geographic inquiry has resulted in ... .

Ex. 7. *Insert the right words:*
(is connected with, is concerned with, nature, biologist, is derived from, subdivide, environment)

1. Ecology is the science which ... environment.
2. The term "ecology" ... ... two Greek words: "oikos" (house) and "logos" (science).
3. The German ... Ernst Haeckel introduced this word into scientific language in 1869.
4. In 1895 this term dealt with plants and ... ; later it included man and his relations with ... .
5. The scientists ... ecology into human ecology, animal ecology, plant ecology and bio-ecology.
6. Ecology ... many sciences: biology, chemistry, physics, history, social sciences and arts.

Ex. 8. *Answer the questions on the text.*

1. What is the derivation of the word "geography"?
2. What kind of science was geography in earlier times?
3. What idea made people thinking, questioning and experimenting in the middle of the 19th century?
4. Geographers began to think of the causes of things and events, didn't they?
5. How can modern geography be described?
6. What do scientists subdivide geography into?

Ex. 9. *Make a short summary of the text.*

TEXT B. THE EARTH

Task: *read the text; find the answers to the questions given below.*

The earth forms an extremely small portion of the universe.

The earth rotates about its polar axis and at the same time is revolving around the sun. The sun in its turn is not fixed in space but shares in the general motion of the solar system relative to the stars.

The Earth rotates on its axis from west to east, giving a succession of day and night every 24 hours. The earth revolves around the sun once in 365 ¼ days, or one year. The path followed by the earth in its annual movements around the sun is the earth's orbit. The plane that includes the path of the earth around the sun and that also passes through the centre of the earth and the centre of the sun is the plane of the earth's orbit.

The earth's axis is inclined 23 ½ from the perpendicular to the plane of the earth's orbit. The axis always points to the same part of the heaven, the north end towards the North Star.

The related position of the earth and sun, and the movements of the earth cause the change of seasons. The vertical ray of the sun annually migrates north and south between the Tropic of Cancer and the Tropic of Capricorn. Long days and the steep rays of summer bring warm weather; short days and the slanting rays of winter bring cold weather.

The geological evidence shows that most of the land surface is covered with a layer of sedimentary rocks, such as sandstones and shales. In addition large areas within the continents are covered with ancient rocks like granite. Geologists believe there is a widespread granitic layer under all the continents.

Below the ocean the structure is different. There is no granitic layer and basalt comes right up to the ocean bottom.

When the earth formed it was very hot. As it was cooling an ocean was forming and rain and rivers, denudation and sedimentary rocks came into existence. The simplest method by which we can determine the age of the earth is based on denudation. If we know the total mass of sedimentary rocks over the earth's surface and the annual amount of sediments carried to the sea by rivers, a simple division shows that the age of the earth is between 1.500 and 3.000 million years.

1. What are the main movements of the earth?
2. What is the earth's orbit?
3. What gives a succession of day and night?
4. What causes the change of seasons?
5. In what way does the structure of the land surface and the structure below the ocean differ?
6. How old is the earth?

TEXT C. THE SHAPE OF THE EARTH

Task: *read the text; get ready to render its contents in Russian.*

To primitive man the earth was a flat disc with its surface diversified by mountains, rivers and seas.

The ancient Egyptians saw the universe as a great box, with Egypt in the center of its long, narrow floor. The top of the box was the sky, from which lamps were suspended by means of ropes.

These were the stars. Other lamps, which were carried in heavenly boats, travelled about the sky and appeared as planets. They thought the Milky Way was the equivalent of the Nile, and the regions through which it flowed were where dead Egyptians lived.

As time went on, people began to put together a remarkably accurate picture of the earth and the solar system. As early as the fifth century B.C. Parmenides declared that the earth was a sphere. It is probable that he realized this from listening to travellers. These discovered that, when they went north, a greater number of stars remained above the horizon all night. They also realized that, when they went south, they could see other stars (for instance, Canopus, which can not be seen from Greece). The early travellers also reported that the length of the day changed with what we now call latitude. This was rather difficult to explain in terms of a flat earth. It was Aristotle who used arguments showing that the earth is spherical. These arguments are: 1) a ship which is sailing away from the shore is disappearing gradually, hull first, masts later; 2) during an eclipse the earth casts a circular shadow; 3) when one is passing from place to place on the surface of the earth the appearance of heaven is constantly changing. But men believed that the earth is a sphere only after the explorers sailed around the earth (circumnavigated it).

Actually the earth is not a perfect sphere but a spheroid flattened near the poles. The circumference of the earth at the equator is about 25 000 miles.

TEXT D. THE SIZE OF THE EARTH

Task: *read the text and say how, when and where the first measurements of the size of the earth were made.*

In time, when the ancient Greeks accepted that the earth was round, attempts were made to estimate its size. Aristotle quotes 400,000 stadia for the circumference. This is much too big. He does not say where he got this figure from. Probably he took it from the earlier work of Eudoxus, a mathematician and astronomer. Archimedes later gave the circumference as 300,000 stadia. This is better, though still 20 per cent in error.

Eratosthenes made the best of the early measurements of the earth's circumference. He worked in the great library at Alexandria. He knew that, at Syene, which was due south of Alexandria, the sun was directly overhead at midday on the first

day of summer. On the first day of summer in 250 B.C., he carefully measured the extent to which the sun's rays slanted away from the vertical at midday in Alexandria. He found that this angle was 1/50 of a complete circle, or a little over 7°. Since the distance from Syene to Alexandria was 5,000 stadia, the circumference of the earth, corresponding to a full circle of 360°, must be 50 times 5,000, or 250,000.

How long is a stadium? There were several different stadia in the use in the ancient world. Eratosthenes probably used the stadium of 517 ft. This means a circumference of 24,000 mi. This is not far from recent calculations of 24,860 mi. In round numbers, the earth's radius is 4,000 mi, the same as 6,400 km. The polar diameter of the earth is 26 miles shorter than the equatorial diameter. Because the earth is so nearly a sphere in shape, all parts of the earth's surface weighs approximately the same in different parts of the earth.

Section III. LEXICAL GRAMMAR TESTS

Для того, чтобы правильно выполнить контрольные работы, необходимо усвоить следующий грамматический материал:

1. Словообразование: основные словообразовательные суффиксы.
2. Видо-временные формы глагола (действительный залог).
3. Согласование времен.
4. Неопределенные местоимения some, any, no и их производные.
5. Значения слов it, one.
6. Модальные глаголы и их эквиваленты.

TEST I

I. Прочтите текст и письменно ответьте на вопросы, следующие за ним.

The Solar System

1. The earth and the sun and other eight planets are isolated in space. The set of nine spheres that circle the bright sun is separated by unimaginable distances from everything else in the universe. Because the sun is its central figure the family of bodies that accompanies it is called the Solar System. The sun's mass is 33,000 times that of the earth and its temperature ranges from 6,000 degrees C at its surface to 25 million degrees C at its core. The sun is almost entirely gaseous but the most prevalent gas is hydrogen with traces of 65 other elements.

2. Until the 17th century it was thought that the solar system consisted only of five planets besides the earth and moon. In 1609 after the invention of the telescope in Holland, Galileo was able to add four new bodies to the system: the brighter of the moons (or satellites) that revolve around Jupiter.

3. The list of planets now include nine; in order from the sun they are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. All except Mercury, Venus and Pluto have satellites. Thousands of small objects called asteroids, all less than 500 mi in diameter, follow separate orbits about the sun in the region between Mars and Jupiter. Comets and meteors are still smaller members of the solar system. The mean diameter of the solar system is approximately about 7 billion miles.

4. Planets revolve around the sun and rotate on their axes. Nearly all the revolutions and rotations are in the same direction, but the rotation rate is different, slow with some planets, rapid with others. Only the rotation of Venus and the revolutions of a few satellites are in the opposite direction. Uranus is an exception of a different kind since it rotates about an axis only 8° from the plane of its orbit.

5. All the orbits except those of the comets lie nearly in the same plane. Planets stay on their orbits according to the law of universal gravity. All space bodies have an attraction of their own and pull each other. This force decreases sharply the greater the distance. At the same time the force of their movement tends to pull them away from each other. This interaction was discovered by the great British scientist Isaak Newton in the 17th century.

1. What does the solar system consist of?
2. How many planets were discovered until the 17th century?
3. What is the central figure in the solar system?
4. Is the sun a gaseous body?
5. What is its prevalent gas?
6. What are the movements of the planets?
7. Why do the planets stay on their orbits?

II. Письменно переведите 1, 4, 5-й абзацы текста.

III. а) Образуйте существительные при помощи данных суффиксов и переведите их:

-er: invent, think, geography, astronomy
-(t)ion: rotate, revolve, isolate, separate
-ment: move, develop, argue, measure
-ist: science, geology, physics, adventure

б) Образуйте прилагательные при помощи данных суффиксов и переведите их:

-al: centre, addition, universe, sphere
-able: imagine, change, move, understand
-ful: peace, hope, power
-less: cloud, hope, feature, rest

IV. Определите видо-временные формы глаголов в следующих предложениях.

1. At present scientists know more than 1000 small bodies in the solar system.
2. The glaciers created two kinds of landscapes.
3. The Chinese had a well-developed knowledge of astronomy.
4. This mine will produce large quantities of coal this year.
5. During the voyage on the Beagle Ch. Darwin was trying to explain the wild life of the Galapagos islands.

V. Поставьте сказуемое придаточного предложения в нужной форме, учитывая правила согласования времен.

Ch. Darwin's father hoped that his son also (to become) a Fellow of Royal Society. As a boy he was observing nature and comparing his observations with everything he (to read) in natural science books. Some time later he heard that H. M. S. Beagle (to be to set off) on a trip to South America. Like most people he thought that each species (to exist) thousands of years and never (to change).

VI. Выберите нужное местоимение из данных в скобках.

1. There is (some, no) water vapour in the atmosphere.
2. (Something, anything) that takes place has weight and exerts pressure by pushing.
3. There is (some, no) place like home.
4. Have your parents been to (some, any) countries?
5. Everything is settled: there is (anything, nothing) to speak about.

VII. Переведите предложения, обращая внимание на различные значения слов it, one.

1. It is only possible to see and study the surface layers of the lithosphere.
2. The older trees give better fruit than the younger ones.
3. The wind has changed. It has gone down.

4. It was Isaak Newton who said that light is a combination of different colours.

5. One must take a pullover or a coat when one goes to England even in summer.

VIII. Переведите предложения, содержащие модальные глаголы и их эквиваленты.

1. They will have to record all the data of the experiment.
2. Bacteria are to be found practically everywhere.
3. In the middle of the last century only the wealthy people were able to go away for holidays.
4. There can be no life without atmosphere.
5. People must consider the fluctuations in temperature when they plant crops.

TEST II

I. Прочтите текст и письменно ответьте на вопросы, следующие за ним.

Atmosphere

1. The air that surrounds the earth is called the atmosphere. It rises upward for hundreds of miles. This air can be heavy or thin, calm or stormy, hot or cold. Without air nothing on earth could live. There could be no colour, no weather, no fire, no sound. Without air, the earth would be burning hot in the daytime and freezing cold at night.

2. Air is the mixture of gases. About 78 per cent it is nitrogen, almost 21 per cent is oxygen, about 1 per cent is argon, carbon dioxide and rare gases. Water vapour is also present but to a variable extent, ranging from nearly none to about 4 per cent. The lower atmosphere also contains a considerable quantity of small, solid particles of different kinds, such as soot, bits of rock and soil, salt, salt grains from the evaporation of seawater droplets, and spores, pollen, and bacteria.

3. The blue colour of the sky is due to the scattering of sunlight by gas molecules and dust particles in the atmosphere. Blue light is scattered most; hence skylight, which consists of scattered sunlight, is predominantly blue, and the sun itself appears a little more yellowish or reddish than it would if there were no atmosphere. At sunrise and sunset, when the sun's light has a long path through the atmosphere, the scattering is greatest, and the sun may be a brilliant red.

4. We live at the bottom of an ocean of air which rests on the earth's surface. Air has weight. Anything that takes place has weight and exerts pressure by pushing. An Italian scientist, Evangelista Toricelly, was the first person to show that pressure of air could be measured. The body of an average man has a surface of 2.300 square inches. At sea level this body will support air pressure of 34.500 pounds. We are not crushed by this enormous weight because the air inside of the bodies presses out just as strongly as the air outside presses in.

5. Scientists speak of the atmosphere as divided into layers – the troposphere, stratosphere, ionosphere, and outer atmosphere. We live in the troposphere, which varies in thickness from 10 miles high at the equator to five miles high at the North and South Poles. All our weather is formed in this layer, as well as clouds, the blue colour of the sky and the winds. From 10 to 50 miles above the earth is the stratosphere.

1. What do we call the atmosphere?
2. What is the thickness of the atmosphere?
3. What is the composition of air?
4. Why is the colour of the sky blue?
5. Has air weight? Who showed this?
6. What layers of the atmosphere are there?
7. What layer do we live in?

II. Письменно переведите 1, 3, 4-й абзацы текста.

III. а) Образуйте существительные при помощи данных суффиксов и переведите их:

-er(or): explore, speak, discover, organize
-(a)tion: vary, evaporate, form, predominate
-ness: thick, bright, thin, kind
-ment: govern, arrange, settle, employ

б) Образуйте прилагательные при помощи данных суффиксов и переведите их:

-able: consider, measure, divide, vary
-ish: red, yellow, boy, child
-y: dust, cloud, wind, storm
-less: colour, form, air, friend

IV. Определите видо-временные формы глаголов в следующих предложениях:

1. The Earth force attracts the nearest part of the Moon.
2. The forces of erosion carried away particles of eroded rock.

3. The scientists will study the materials of the walls of the deepest mines.

4. Men have given different names to different parts of the sea.

5. James Cook had firmly decided on a career at sea and joined the Royal Navy in 1775.

V. Поставьте сказуемое придаточного предложения в нужной форме, учитывая правила согласования времен.

1. For a long time men thought that the ocean bed (to be) smooth.

2. Men believed that the earth is a sphere only after the explorers (to sail) around the earth.

3. The tree-ring researches found that frost damage (to follow) major well-known eruptions.

4. More than 3000 years (to pass) before Eric the Red established a settlement in Greenland.

5. It was once assumed that the deepest levels of the seas (to be found) farthest from land.

VI. Выберите нужное местоимение из данных в скобках.

1. There is (no, some) water vapour in the air.

2. (Some, any) changes in the boundaries of countries make new maps necessary.

3. The storm was so severe, that there was (somebody, nobody) out of doors.

4. In (any, some) ways, Britain is a less polluted country than it was thirty years ago.

5. This type of landscape can be found (somewhere, anywhere).

VII. Переведите предложения, обращая внимание на различные значения слов **"it", "one".**

1. The deeper one goes into the ocean the smaller and sparser life becomes.

2. The first world maps were made by the Greeks, it is supposed that Anaximander had designed the first ones.

3. It's interesting to know that the world's highest temperature was recorded in Ethiopia – 63°C.

4. Geology deals with the history of the earth. It studies agencies and processes which are continually altering it.

5. It was Julius Caesar who laid the basis for a new calendar.

VIII. Переведите предложения, содержащие модальные глаголы и их эквиваленты.

1. Geologists must know how to make topographic or mine maps.

2. The scientists will have to determine the nature of these rocks.

3. The artificial satellites are to observe the Earth from space.

4. The Australians have produced types of wheat which can withstand drought.

5. Planning summer holidays in England is not easy, because one year June may be hot and sunny, another year it might be the other way round.

UNIT II

PHYSICAL GEOGRAPHY

Section I. TOPICAL VOCABULARY

	Index
achieve [ə´tʃi:v] *v* достигать, добиваться	D
amenable [ə´mi:nəbl] *a* поддающийся	T_1
apply [ə´plaı] *v* использовать, применять	D
arrive [ə´raıv] *v* достигать (чего-либо)	D
assist [ə´sıst] *v* помогать, содействовать	B
authority [ɔ´θɔrıtı] *n* власть, полномочие	A
barb [bɑ:b] *n* зазубрина	D
barrier [´bærıə] *n* барьер, преграда, препятствие	B
behave [bı´heıv] *v* вести себя, поступать	D
behaviour [bı´heıvjə] *n* поведение	D
belong [bı´lɔŋ] *v* принадлежать	A
blur [blə:] *v* стирать, изглаживать	A
border [´bɔ:də] *n* граница	B
boring [bɔ:rıŋ] *a* скучный	C
certain [´sə:tn] *a* определенный, неизменный, постоянный	T_1
chart [tʃɑ:t] *n* карта, диаграмма, схема	D
coal [koul] *n* (каменный) уголь	C
coalfield [´koulfi:ld] *n* каменноугольный бассейн, месторождение угля	C
coax [kouks] *v* получить, добиваться	T_1
community [kə´mju:nıtı] *n* община, общество, содружество, общность	T_2
comparatively [kəm´pærətıvlı] *adv* сравнительно, относительно	C
complicated [´kɔmplıkeıtıd] *a* сложный	T_1
consistent [kən´sıst(ə)nt] *a* последовательный, постоянный	T_1

continuous [kən'tɪnjuəs] *a* непрерывный, длительный T_2
contour ['kɔntuə] *v* наносить контур, вычерчивать в горизонталях D
current ['kʌrənt] *n* поток T_1
daylight ['deɪlaɪt] *n* дневной свет, солнечный свет T_2
deliver [dɪ'lɪvə] *v* выпускать, посылать, метать, бросать T_1
denote [dɪ'nout] *v* указывать, показывать, отличать, значить D
depict [dɪ'pɪkt] *v* изображать, описывать D
dewpoint ['dju:poɪnt] *n* точка росы, температура таяния или конденсации D
direct [d(a)ɪ'rekt] *a* прямой T_2
disastrous [dɪ'z ɑ:strəs] *a* бедственный, гибельный T_1
distant ['dɪst(ə)nt] *a* отдаленный, удаленный, дальний, далекий B
distinct [dɪs'tɪŋ(k)t] *a* различный, разный, отличающийся (от чего-либо) A
district ['dɪstrɪkt] *n* округ, район, участок, местность T_1
dominant ['dɔmɪnənt] *a* господствующий, основной, преобладающий B
dot [dɔt] *n* точка D
drain [dreɪn] *v* дренировать, осушать, истощать, вытекать, собирать воды B
drainage ['dreɪnɪdʒ] *n* дренаж, осушение, спуск воды B
drought [draut] *n* засуха, сухость (воздуха, климата) T_1
dry [draɪ] *a* сухой T_1
edge [edʒ] *n* край, кромка B
efficient [ɪ'fɪʃ(ə)nt] *a* эффективный, действенный T_1
effort ['efət] усилие, напряжение, попытка T_1
encounter [ɪn'kauntə] *v* (неожиданно) встретить, наталкиваться (на трудности и т.п.) B
erode [ɪ'roud] *v* выветривать, размывать, подвергаться эрозии B
escarpment [ɪs'kɑ:pmənt] *n* откос, крутость, вертикальное обнажение породы B
evolve [ɪ'vɔlv] *v* развивать(ся), превращаться, раскрывать, выявлять D
expanse [ɪks'pæns] *n* пространство, протяжение; простор, увеличение, расширение B
expect [ɪks'pekt] *v* ожидать, рассчитывать, предполагать, полагать, думать D
expensive [ɪks'pensɪv] *a* дорогой, дорогостоящий, требующий больших затрат T1
experience [ɪks'pɪərɪəns] *n* опыт T_2, D
experience [ɪks'pɪərɪəns] *v* испытать, узнать по опыту, подвергать испытанию T_2, D
expose [ɪks'pouz] *v* выставлять, подвергать действию (солнца, непогоды) T_2
exposure [ɪks'pouʒə] *n* выставление (под дождь, на солнце) T_2, C
fabric ['fæbrɪk] *n* структура, строение, устройство B

facilitate [fə'sɪlɪteɪt] *v* облегчать, помогать, способствовать B
falling ['fɔ:lɪŋ] *a* падающий, понижающийся D
familiar [fə'mɪljə] *a* хорошо знакомый (с чем-либо), знающий (что-либо) D
farmer ['fɑ:mə] *n* фермер T_1
fashion ['fæʃ(ə)n] *n* образ, форма D
feel [fi:l] *v* чувствовать, ощущать; сознавать A
fine [faɪn] *a* ясный, хороший, сухой (о погоде) D
foggy ['fɔgɪ] *a* туманный, неясный D
forest ['fɔrɪst] *n* лес C
formation ['fɔ'meɪʃən] *n* образование, формирование T_1
generally ['dʒen(ə)rəlɪ] *adv* обычно; как правило T_2
gently ['dʒentlɪ] *adv* отлого B
govern ['gʌv(ə)n] *v* править, управлять A
grassland ['grɑ:slænd] *n* лугопастбищное угодье, район лугов и пастбищ C
grow [grou] *v* расти, увеличиваться T_1
hard [hɑ:d] *a* твердый B
heat [hi:t] *n* жара, зной T_2
hedgerow ['hedʒrou] *n* живая изгородь; полезащитная полоса C
height [haɪt] *n* высота, вышина, вершина D
hemisphere ['hemɪsfɪə] *n* полушарие T_2
highland ['haɪlənd] *n* нагорье, высокогорная местность C
hill [hɪl] *n* холм, возвышенность, пригорок B
hurry-up ['hʌrɪ'ʌp] *a* спешный, срочный T_1
ice [aɪs] *n* лед T_1
identity [aɪ'dentɪtɪ] *n* тождественность, идентичность A
indicate ['ɪndɪkeɪt] *v* указывать, показывать B
influence ['ɪnfluəns] *n* влияние, воздействие B
influence ['ɪnfluəns] *v* оказывать влияние, воздействие, влиять B
instantly ['ɪnstəntlɪ] *adv* немедленно, тотчас, мгновенно, моментально T_1
interior [ɪn'tɪərɪə] *a* внутренний, расположенный в глубине страны, удаленный от моря B
involve [ɪn'vɔlv] *v* включать в себя, заключать, содержать, подразумевать, предполагать T_1
iodide ['aɪədɪd] *n* йодид T_1
iron ['aɪən] *n* железо C
island ['aɪlənd] *n* остров A
join ['dʒɔɪn] *v* соединять(ся), объединяться, присоединяться A
judge [dʒʌdʒ] оценивать, делать вывод T_1
keen [ki:n] *a* интенсивный, напряженный D
lack [læk] *v* испытывать недостаток (в чем-либо), недоставать, не хватать, быть недостаточным C
literally ['lɪt(ə)rəlɪ] *adv* буквально, дословно T_1
location [lo(u)'keɪʃn] *n* местоположение, расположение T_2
loose [lu:s] *a* неплотный, рыхлый, слабо сцементированный B

lowland [ˈlouləndˌ] *n* низменность, низкая местность, долина, низина — B
major [ˈmeɪdʒə] *a* главный, значительный — T_1
mantle [ˈmæntl] *n* покров — B
map [mæp] *n* карта — D
margin [ˈmɑːdʒɪn] *n* край, грань, полоса, граница — B
maritime [ˈmærɪtaɪm] *a* морской — T_2
mark [mɑːk] *v* отмечать, характеризовать, отличать, выделять — B
moderate [ˈmɔd(ə)reɪt] *v* смягчать — T_2
modification [ˌmɔdɪfɪˈkeɪʃn] *n* модификация, изменение — T_1
moisture [ˈmɔɪstʃə] *n* влажность, сырость, влага — T_1
moorland [ˈmuələnd] *n* вересковая пустошь, местность, поросшая вереском — C
nucleation [ˌnjuːklɪˈeɪʃ(ə)n] *n* искусственное вызывание дождя — T_1
nucleus [ˈnjuːklɪəs] (pl. – iai) *n* ядро, зародыш (кристалла) — D
observation [ˌɔbzəˈveɪʃn] *n* наблюдение, изучение — D
obvious [ˈɔbvɪəs] *a* явный, очевидный, понятный — T_2
occur [əˈkɜː] *v* случаться, происходить — T_2
orographic [ˌɔːrɔ(u)ˈgræfɪk] *a* орографический — T_1
outline [ˈautlaɪn] *n* контур, очертание — D
pattern [ˈpæt(ə)n] *n* структура, форма, строение — B
pellet [ˈpelɪt] *n* шарик, гранула, пилюля, пуля — T_1
pictorial [pɪkˈtɔːrɪəl] *a* иллюстрированный — D
plain [pleɪn] *n* равнина — B
poor [puə] *a* неплодородный (о почве) — C
positive [ˈpɔzətɪv] *a* положительный — T_2
precise [prɪˈsaɪz] *a* точный, определенный — C
precipitation [prɪˌsɪpɪˈteɪʃ(ə)n] *n* выпадение осадков, осадки — T_1
pressure [ˈpreʃə] *n* давление — D
prevailing [prɪˈveɪlɪŋ] *a* преобладающий, превалирующий, господствующий — D
private [ˈpraɪvɪt] *a* личный, частный — T_1
propane [ˈprəupeɪn] *n* пропан — T_1
provide [prəˈvaɪd] *v* обеспечивать — B
proximity [prɔkˈsɪmɪtɪ] *n* близость, соседство — T_2
rancher [ˈrɑːn(t)ʃə] *n* фермер — T_1
range [reɪndʒ] *n* пределы — C, D
reach [riːtʃ] *v* простираться, вытягиваться, протягиваться — C
reason [riːzn] *n* причина, основание — T_2
receive [rɪˈsiːv] *v* получать — T_2
record [rɪˈkɔːd] *v* регистрировать, фиксировать, показывать — D
refer [rɪˈfɜː] *v* подразумевать (в речи) — A
reflect [rɪˈflekt] *v* отражать — A
relationship [rɪˈleɪʃ(ə)nʃɪp] *n* отношение, взаимоотношение, связь — T_2

representation [ˌreprɪzenˈteɪʃ(ə)n] *n* изображение — D
require [rɪˈkwaɪə] *v* требовать, нуждаться (в ч.-л.) — T_1
responsive [rɪsˈpɔnsɪv] *a* отзывчивый, податливый — T_1
rising [ˈraɪzɪŋ] *a* возрастающий, повышающийся, восходящий — T_1
rolling [ˈroulɪŋ] *a* повторяющийся, чередующийся, холмистый, пересеченный (о местности) — C
rough [rʌf] *a* неровный, шероховатый, труднопроходимый (о местности), пересеченный (о местности) — B
scenery [ˈsiːnərɪ] *n* пейзаж, ландшафт — C
sedimentary [ˌsedɪˈment(ə)rɪ] *a* осадочный — B
seeding [ˈsiːdɪŋ] *n* рассеивание, посев — T_1
separate [ˈsep(ə)rɪt] *a* отдельный, обособленный, самостоятельный — A
settlement [ˈsetlmənt] *n* заселение, поселение — B, C
shorthand [ˈʃɔːthænd] *n* стенография — D
show [ʃou] *v* показывать, указывать — D
significant [sɪgˈnɪfɪkənt] *a* важный, многозначительный — B, C
silver [ˈsɪlvə] *a* серебряный — T_1
simultaneous [ˌsɪm(ə)lˈteɪnjəs] *a* одновременный — D
single [sɪŋgl] *a* единственный, отдельный, единый — A
slope [sloup] *n* уклон, покатость, наклон — T_1
smoke [smouk] *n* дым — T_1
snow [snou] *n* снег — T_1
solve [sɔlv] *v* решать, разрешать — T_1
south [sauθ] *n* юг — C
south [sauθ] *a* южный — C
southern [ˈsʌðən] *a* южный, относящийся к югу, находящийся на юге, обращенный к югу, дующий с юга (о ветре) — C
spawn [spɔːn] *v* порождать, создавать — T_1
split [splɪt] *v* раскалывать(ся) — B
spontaneous [spɔnˈteɪnjəs] *a* самопроизвольный, спонтанный, непроизвольный — T_1
sprawling [ˈsprɔːlɪŋ] *a* растянувшийся — B
state [steɪt] *n* государство, штат — T_1, A
steady [ˈstedɪ] *a* устойчивый, постоянный — D
stony [ˈstounɪ] *a* каменистый — C
strength [streŋθ] *n* сила — D
stretch [streʧ] *v* тянуться, простираться — B
terrain [ˈtereɪn] *n* территория, местность — B
thin [θɪn] *a* бесплодный (о почве) — C
thundery [ˈθʌndərɪ] *a* грозовый — D
tilt [tɪlt] *v* наклонять — T_2
tiny [ˈtaɪnɪ] *a* очень маленький — T_1
towering [ˈtauərɪŋ] *a* высокий, огромный — C
tributary [ˈtrɪbjut(ə)rɪ] *n* приток — B
turn-up [ˈtɜːnˈʌp] *n* загнутый, отогнутый — B
variation [ˌvɛərɪˈeɪʃn] *n* колебание, изменение — T_2
variety [vəˈraɪtɪ] *n* разнообразие — C

vast [vɑ:st] *a* обширный, громадный, безбрежный, огромный	B
visibility [ˌvɪzɪˈbɪlɪtɪ] *n* видимость	D
water [ˈwɔ:tə] *n* вода	T_1
wet [wet] *a* мокрый, влажный, сырой	C
wind [wɪnd] *n* ветер	D
yield [ji:ld] *n* выпадение (снега)	T_1

Section II. READING MATERIAL

TEXT A. COUNTRY AND PEOPLE

Task: *read the text; translate it into Russian in written form.*

Geographically speaking.

Lying off the north-west coast of Europe, there are two large islands and several much smaller ones. Collectively, they are known as *The British Isles.* The largest island is called *Great Britain.* The other large one is called *Ireland.*

Politically speaking.

In the British Isles there are two states. One of these governs most of the island of Ireland. This state is usually called *The Republic of Ireland.* It also called "Eire" (its Irish language name). Informally it is referred to as just "Ireland" or "the Republic".

The other state has authority over the rest of the British Isles (the whole of Great Britain, the northeastern area of Ireland and most of the smaller islands). Its official name is *The United Kingdom of Great Britain and Northern Ireland* although it is usually known by a shorter name. At the Eurovision Song Contest, at the United Nations and in the European Parliament, for instance, it is referred to as "the United Kingdom". In everyday speech this is often shortened to "the UK". In other contexts it is referred to as "Great Britain". This, for example, is the name you hear when a gold medal winner steps onto the rostrum at the Olympic Games. The stickers on cars ("GB") are another example of the use of this name. In writing and speaking that is not especially formal or informal, the name "Britain" is used. The normal adjective, when talking about something to do with the UK, is "British".

The four nations.

People often refer to Britain by another name. They call it "England". But this is not strictly correct, and it can make some people angry. England is only one of the four nations of the British Isles (England, Scotland, Wales and Ireland). Their political unification was a gradual process that took several hundred years. It

was completed in 1800 when the Irish Parliament was joined with the Parliament for England, Scotland and Wales in Westminster, so that the whole of the British Isles became a single state – the United Kingdom of Great Britain and Ireland. However, in 1922, most of Ireland became a separate state.

At one time the four nations were distinct from each other in almost every aspect of life. In the first place, they were different racially. The people in Ireland, Wales and highland Scotland belonged to the Celtic race; those in England and lowland Scotland were mainly of Germanic origin. This difference was reflected in the languages they spoke. People in the Celtic areas spoke Celtic languages: Irish Gaelic, Scottish Gaelic and Welsh. People in the Germanic areas spoke Germanic dialects (including the one which has developed into modern English). The nations also tended to have different economic, social and legal systems.

Today these differences have become blurred. But they have not completely disappeared. Although there is only one government for the whole of Britain, and people have the same passport regardless of where in Britain they live, some aspects of government are organized separately (and sometimes differently) in the four parts of the United Kingdom. Moreover, Welsh, Scottish and Irish people feel their identity very strongly.

EXERCISES

Ex.1. Read the following proper names correctly. Mind the stress.

ˈEurope	Euroˈpean ˈParliament	ˈWestminster
ˈIreland	Uˈnited ˈKingdom	ˈCeltic
ˈBritain	ˈEngland	ˈGermanic
ˈBritish	ˈScotland	ˈGaelic
ˈEire	ˈWales	ˈScotish
ˈNorthern ˈIreland	ˈIrish ˈParliament	ˈWelsh

Ex. 2. Memorize the following pairs of derivatives.

N → V	V → N
difference – to differ	to govern – government
organization – to organize	to refer – reference
identity – to identify	to win – winner
origin – to originate	to reflect – reflection
completion – to complete	to develop – development

N → Adj

Britain – British
Ireland – Irish
Wales – Welsh
Scotland – Scottish
economy – economic

Ex. 3. Transform as in the models.

Model 1: to govern the island – the government of the island

to win a medal, to use the name, to refer to Britain, to unite the country, to separate the state

Model 2: rapid development – to develop rapidly

complete disappearance, gradual completion, gradual separation, political unification, different organization

Ex. 4. Match English and Russian equivalents.

1. to have authority	a. постепенный процесс
2. the whole of Great Britain	b. стать единым государством
3. in other contexts	c. вся Великобритания
4. informal	d. германское происхождение
5. a gradual process	e. иметь разные системы
6. to become a single state	f. в другом контексте
7. to become a separate state	g. невзирая на
8. to have different systems	h. иметь власть
9. regardless of	i. стать отдельным государством
10. Germanic origin	j. неофициальный

Ex. 5. Choose the right word or word combination.

1. The normal adjective, when talking about something to do with the UK, is ... .

a) English b) British c) Irish

2. The political unification of the four nations of the British Isles was a ... process.

a) complete b) rapid c) gradual

3. In 1922 most of Ireland became a ... state.

a) single b) separate c) different

4. The people of England and lowland Scotland were mainly of ... origin.

a) Germanic b) Celtic c) French

5. Welsh, Scottish and Irish people ... their identity.

a) speak b) refer c) feel

Ex. 6. Complete the sentences.

1. The largest island is called ... .
2. In everyday speech "the United Kingdom" is often shortened to the ... .
3. People often refer to Britain by ... .
4. The Irish Parliament was joined with the Parliament for England, Scotland and Wales in ... .
5. In the first place the four nations were different ... .
6. This difference was reflected in the ... .

Ex. 7. Insert the right word:
(use, referred, strictly, tended, known, nations, belonged)

1. Informally the Republic of Ireland is ... as just "Ireland" or "the Republic".
2. The official name of the country is usually ... by a shorter name.
3. The stickers on cars ("GB") are another example of the ... of this name.
4. To call Britain "England" is not ... correct.
5. England is only one of the four ... of the British Isles.
6. The people in Ireland, Wales and highland Scotland ... to the Celtic race.
7. The nations also ... to have different economic, social and legal systems.

Ex. 8. Answer the questions on the text.

1. How many states are there in the British Isles?
2. What is the official name of the country?
3. What name is used in everyday speech?
4. What is the normal adjective when talking about something to do with the UK?
5. Is it correct to call Britain "England"? Why?
6. How long did the process of political unification of the country take place?
7. When did the whole of the British Isles become a single state?

8. What happened in 1922?
9. Were the four nations different racially?
10. What was this difference reflected in?
11. Have these differences completely disappeared today?

Ex. 9. Make a short summary of the text.

TEXT B. THE PHYSICAL ENVIRONMENT OF THE UNITED STATES

T a s k : *read the text; find the answers to the questions given below.*

The dominant topographic features of the United States tend to extend north-south across the country. The interior of the country is a vast, sprawling lowland that stretches from the Gulf of Mexico to the Canadian border and then on to Alaska. Geographers with an interest in landform development place this expanse of that land and gently rolling hills in three different physiographic regions – the Atlantic and Gulf coastal plains, the interior lowland (which some split into the Great Plains and the interior), and the Canadian Shield.

The Atlantic and Gulf coastal plains reach north along the east coast of the United States as far as the southern margins of New England.

Northward, the interior lowland, although noticeably hillier than the coastal plains, has almost no rough terrain. This region is like a saucer, turned up at the edges and covered with a deep series of sedimentary rocks. These sedimentary beds are generally quite flat.

The boundary between the Great Plains and the interior plains is marked by a series of low escarpments that indicate the eastern edge of the mantle of loose sediments, eroded from the Rocky Mountains, that covers the plains.

The character of this massive interior lowland area has had a number of important influences on the economic and settlement history of the United States. In addition to the vast agricultural potential it provides, fully half the country can be crossed without encountering significant topographic barriers to movement. This facilitated the integration of both this region and the distant West into the economic fabric of the country. Nearly all of the interior lowland is drained by the Mississippi River or its tributaries.

This drainage pattern assisted regional integration by providing a transport and economic focus for the land west of the Appalachian Mountains.

North and northeast of the central lowland is the Canadian Shield, where old, hard crystalline rocks lie at the surface.

1. What is the interior of the country?
2. What are the three different physiographic regions?
3. What territory do the Atlantic and Gulf coastal plains occupy?
4. What facilitated the integration of the interior plains and the distant west into the economic fabric of the country?

TEXT C. LAND AND SETTLEMENT

T a s k : *read the text, get ready to render its contents in Russian.*

Britain has neither towering mountain ranges, nor impressively large rivers, plains or forests. But this does not mean that its landscape is boring. What it lacks in grandeur it makes up for in variety. The scenery changes noticeably over quite short distances. It has often been remarked that a journey of 100 miles (160 kilometres) can, as a result, seem twice as far. Overall, the south and east of the country is comparatively low-lying, consisting of either flat plains or gently rolling hills. Mountainous areas are found only in the north and west, although these regions also have flat areas.

Human influence has been extensive. The forests that once covered the land have largely disappeared. Britain has a greater proportion of grassland than any other country in Europe except the Republic of Ireland. One distinctive human influence, especially common in southern England, is the enclosure of fields with hedgerows. This feature increases the impression of variety. Although many hedgerows have disappeared in the second half of the twentieth century (farmers have dug them up to increase the size of their fields and become more efficient), there are still enough of them to support a great variety of bird-life.

The most precise distinction is geological. The rocks of most of the north and west of Great Britain are harder and older than those of the south and east. These older rocks are covered by large areas of moorland such as the Lake District, the Pennines and much of Scotland and Wales, where the soils are poor, thin and stony. In addition, these areas are wetter and harder to reach than the lower land to the south and east. As a result, these areas of the British Isles are thinly populated except where coal or iron have been discovered. Most of the coalfields, which were the home of the industrial revolution, lie along the dividing line between highland and lowland Britain.

TEXT D. WEATHER MAPS

T a s k : *read the text and say, what the forecaster's main business is.*

The earliest weather map was published by Edmund Halley as far back as in 1688, but it was not until the Great Exhibition of 1851 that a map was published showing the simultaneous readings of weather elements at various places. From these earliest maps there evolved very rapidly a standardized system of representation which is familiar to most newspaper readers. The weather map usually shows on an outline chart, or on a contoured chart of geographical features, a group of figures and letters, with one or two pictorial symbols, placed against each of the dots which indicate the positions of weather-reporting stations. These symbols tell – short-hand fashion – the weather at that particular place at the hour which is, as far as possible, the same for all the places concerned. The most important element recorded is the height of the barometer.

Probably the next most important element to be depicted is the wind. The direction is shown by an arrowshaft travelling with the wind into the observing station, the strength of the wind being denoted by the number of barbs on the arrow. The other elements written in give the change of barometric pressure in the last three hours telling the forecaster whether "the glass" is steady, or rising, or falling, the temperature of the air and its dew-point, the range of visibility, type of cloud together with its amount and approximate height, and whether it is and has been in the recent past fine, or raining, or foggy, or thundery, etc.

The forecaster's main business is to answer the following questions: What type of weather is associated with the prevailing pressure distribution? How will they develop as they move? What will the influence be of local geographical conditions on their general behaviour?

Like children, the weather does not always "behave" as expected; the solution of the forecasters' problems cannot, therefore, be arrived at by applying a set of stereotyped formulae: experience based on keen observation must play a large part in any success which the professional achieves.

Section III. LEXICAL-GRAMMAR TESTS

Для того, чтобы правильно выполнить контрольные работы, необходимо усвоить следующий грамматический материал:

1. Видо-временные формы глагола (действительный и страдательный залог).
2. Неличные формы глагола: инфинитив, причастие, герундий.

TEST I

I. Прочтите текст и письменно ответьте на вопросы, следующие за ним.

Methods of weather modification

1. The first scientific attempt at coaxing moisture from a cloud was in 1946, when scientist Vincent Schaefer dropped 3 pounds of dry ice from an airplane into a cloud and, to his delight, produced snow. The success of the experiment was modest, but it spawned optimism among farmers and ranchers around the country. It seemed to them that science had finally triumphed over weather.

2. Unfortunately, it didn't work out that way. Although there were many cloud-seeding operations during the late 1940s and the 1950s, no one could say whether they had any effect on precipitation. Cloud seeding, or weather modification as it came to be called, was clearly more complicated than had been thought. It was not until the early 1970s that enough experiments had been done to understand the processes involved. What these studies indicated was that only certain types of clouds are amenable to seeding. One of the most responsive is the winter orographic cloud, formed when air currents encounter a mountain slope and rise. If the temperature in such a cloud is right, seeding can increase snow yield by 10 to 20 per cent.

3. There are two major methods of weather modification. In one method, silver iodide is burned in propane-fired ground generators. The smoke rises into the clouds where the tiny silver-iodide particles act as nuclei for the formation of ice crystals. The alternate system uses airplanes to deliver dry-ice pellets. Dry ice does not provide ice-forming nuclei. Instead, it lowers the temperature near the water droplets in the clouds so that they freeze instantly – a process called spontaneous nucleation. Seeding from aircraft is more efficient but also more expensive.

4. About 75 per cent of all weather modification in the United States takes place in the Western states. With the population of the West growing rapidly, few regions of the world require more water. About 85 per cent of the waters in the rivers of the West comes from melted snow. As one expert put it, the water problems of the future may make the energy problems of the 70s seem like child's play to solve. That's why the U.S. Bureau of Reclamation, along with state governments, municipal water districts, and private interests such as ski areas and agricultural cooperatives, is putting increased effort into cloud-seeding efforts. Without

consistent and heavy snowfalls in the Rockies and Sierras, the West would literally dry up. The most intensive efforts to produce precipitation was during the West's disastrous snow drought of 1976–77. It is impossible to judge the efficiency of weather modification based on one crash program, but most experts think that such hurry-up programs are not very effective.

1. When was the first scientific attempt at coaxing moisture from a cloud made?
2. Did the cloud-seeding operations have any effect on precipitation?
3. How many major methods of weather modification are there?
4. Where does weather modification take place in the United States?
5. What do most experts think about hurry-up programs?

II. Письменно переведите 2-й и 4-й абзацы текста.

III. Раскройте скобки, употребив глагол в нужной видо-временной форме.

1. Industrial smoke and dust really (to become) the most important problem in ecology lately.
2. Pollution (to be) widely in the news nowadays and probably (to be) for a long time to come.
3. By 2050 the average annual temperature (to be) 3–4°C higher.
4. There (to be) no towns in Britain before the Romans (to conquer) it.
5. By about 450 B.C. the Britons (to occupy) the whole British Isles.

IV. Преобразуйте предложения из действительного залога в страдательный.

1. The moving wall of ice changes everything on its path.
2. They will obtain water from artesian wells.
3. England exerted her economic and military power over the other three nations.
4. In late years the chemical industries have used from 60 to 65 per cent of all the salt produced in the United States.
5. We can see the effect of frost in a tree on the growth of rings in the trunk.

V. Переведите предложения, содержащие глаголы в страдательном залоге.

1. Many aspects of everyday life are organized according to English custom and practice.

2. The political unification of Britain was not achieved by mutual agreement.
3. The present queen of the country is universally known as "Elizabeth the Second".
4. The image of a wet, foggy land was created two thousand years ago by the invading Romans.
5. This image has been perpetuated in modern times by Hollywood.

VI. Подчеркните инфинитив, определите его форму и функцию.

1. The aim of geography is to study the earth in its relation to man.
2. Geology attempts to interpret the earth in the light of knowledge of chemistry, physics, astronomy and other sciences.
3. Many theories to explain the origin of the continents have been put forth.
4. To explore the north the prospectors used airplanes.
5. Greece was the first country to win freedom from the Turks.

VII. Преобразуйте предложения, употребляя причастие в функции определения или обстоятельства.

1. The path which is followed by the earth in its annual movement around the Sun is the earth's orbit.
2. When he was writing his thesis he used the material of many expeditions.
3. North America is a low platform that rises above the sea.
4. When water freezes it expands by about one tenth its volume.

VIII. Выпишите и письменно переведите предложения с герундием.

1. Making its way down the valley, the river cuts through rocks of different resistance.
2. Forecasting weather with great accuracy is no easy matter.
3. Improved methods of observing atmosphere are developed.
4. The sole aim of this expedition was obtaining new data about the sea bottom.
5. The face of the earth is always changing.
6. These things happen so rarely that it is not worth organizing life to be ready for them.

TEST II

I. Прочтите текст и письменно ответьте на вопросы, следующие за ним.

Climate

1. Climate is the aggregate of day-to-day weather conditions over a period of many years. It is the result of the interaction of many different elements, the most important of which are temperature and precipitation.

2. Climatic patterns are a result of the interaction of three geographic controls. The first is latitude. The earth is tilted on its axis with reference to the plane of its orbit around the sun. As it makes its annual revolution around the sun, first the Northern Hemisphere and then the Southern are exposed to the more direct rays of the sun. During the Northern Hemisphere's summer, higher latitude locations have longer days, with far northern points experiencing a period of continuous daylight. Daylight periods during the winter months are shorter at higher latitudes, whereas more southerly locations have both longer days and exposure to more direct rays of the sun.

3. The second control is based on the relationship between land and water. Land tends to heat and cool more rapidly than water. In a tendency called continentality, places far from large bodies of water experience greater seasonal extremes of temperature than do coastal communities. Parts of the northern Great Plains experience annual temperature ranges close to 65°C; annual differences of as much as 100°C (from 50°C to − 50°C) have been recorded in some locations.

4. The converse effect occurs at maritime locations, especially on the western coast of continents in the mid-latitudes. These locations have smaller temperature ranges as a result of what is called a maritime influence. Summer and winter extremes are moderated by the movement onshore of prevailing westerly wind systems from the ocean. Horizontal and vertical ocean currents minimize seasonal variations in the surface temperature of the water. The moderated water temperature serves to curb temperature extremes in the air mass above the surface.

5. Proximity to large water bodies also tends to have a positive influence on precipitation levels, with coastal locations receiving generally higher amounts. The reason for this should be obvious; large water bodies provide greater levels of evaporation and thus increase the amount of moisture in the atmosphere.

1. What is climate?
2. What is the first geographic control?
3. What is the second control based on?
4. What minimizes seasonal variations in the surface temperature of water?
5. What has a positive influence on precipitation levels?

II. Письменно переведите 2, 4, 5 -й абзацы текста.

III. Раскройте скобки, употребив глагол в нужной видо-временной форме.

1. Men (to use) maps for thousands of years.
2. In ancient times little (to know) about the shape of the earth.
3. The earliest maps (to be) not accurate, but still they (to be) useful.
4. Water (to exist) as a substance in three stages: ice, liquid water and steam.
5. Today the ocean basins (to contain) 300 million cubic miles of water.

IV. Преобразуйте предложения из действительного залога в страдательный.

1. James Cook surveyed the St. Lawrence River in Canada.
2. The North Sea separates Great Britain from Europe in the east.
3. The shallow waters provide excellent fishing grounds.
4. For centuries men have secured salt from the ocean.
5. The Irish improved farming conditions.

V. Переведите предложения, содержащие глаголы в страдательном залоге.

1. California is separated from most of its adjacent landscape because of its leadership role in changing the culture of America.
2. Megalopolis has been defined traditionally along county lines.
3. Farther north, the Columbia-Snake Basin has been filled by repeated lava flows to a depth of more than 1000 meters.
4. Some of America's best known volcanic peaks are found there.
5. The western parts of Britain are wetter than the east, which is fairly sheltered.

VI. Подчеркните инфинитив, определите его форму и функцию.

1. In 1888 Nansen became the first to cross over the inland ice from east to west.

2. This lighthouse stands out like a traffic policeman to guide ships round the dangerous corner from the Bristol into the English Channel.

3. By 1973 there was no doctor on the island, no nurse, no policeman – such services had to be obtained from other islands.

4. The arrival of workers to build their oil storage tanks has obviously had a major effect on the people of the island.

5. It is for the islanders to assess that effect.

VII. Преобразуйте предложения, употребляя причастие в функции определения или обстоятельства.

1. Fog on highways can cause chain reaction accidents which involve dozens of cars.

2. Tsunamis are common in the Pacific Ocean which is bordered by zones of crustal instability.

3. When the river makes its way down the valley, it cuts through rocks of different resistance.

4. When they were working in the mine they secured many interesting specimens.

5. The areas which are influenced by marine climate receive ample precipitation.

VIII. Выпишите и письменно переведите предложения с герундием.

1. Cooling may be caused by radiation, by contact with cold surfaces, by mixing masses of air of different temperatures.

2. Having learned the characteristics of the important rocks we can more easily see how various external and internal forces acting on them have produced our present topography.

3. People in some places have become the regular victims of flooding.

4. The Environment Agency has prepared maps showing land at risk.

5. A seismograph is an instrument for recording vibrations of the earth's crust.

6. One method of obtaining salt is allowing water to evaporate.

UNIT III

ECONOMY GEOGRAPHY

Section I. TOPICAL VOCABULARY

Index

accessibility [əksesɪ'bɪlɪtɪ] *n* доступность — T_2
activity [æk'tɪvɪtɪ] *n* деятельность — T_2
aim [eɪm] *n* цель, намерение — A
amenity [ə'mi:nɪtɪ] *n* приятность, мягкость — T_2
arable ['ærəbl] *a* пахотный — C
argue ['ɑ:gju:] *v* спорить, аргументировать — A
armament ['ɑ:məmənt] *n* вооружение, оружие — B
available [ə'veɪləbl] *a* доступный, имеющийся в распоряжении — T1
barrel ['bærəl] *n* баррель (мера жидких, сыпучих и некоторых твердых материалов) 1 barrel = 140.6 – 190.9 litres — A
bay [beɪ] *n* залив, бухта — C
bituminous [bɪ'tju:mɪnəs] *a* битумный, битуминозный — T_2
blast-furnace [blɑ:st'fə:nɪs] *n* домна, доменная печь — T_1
brass [brɑ:s] *n* латунь, желтая медь — D
chief [tʃi:f] *a* главный; основной, важнейший — B
chiefly [tʃi:flɪ] *adv* главным образом — T_1
civic ['sɪvɪk] *a* гражданский — D
claim [kleɪm] *v* требовать; утверждать, заявлять — A
cliff [klɪf] *n* отвесная скала; утес — C
cloth [klɔθ] *n* ткань, сукно, полотно — T_1
cluster [klʌstə] *v* группа; скопление, концентрация — T_2
coalesce [kou'les] *v* срастаться; объединяться — T2
coin [kɔɪn] *v* чеканить; штамповать — C
coke [kouk] *n* кокс — T_1
commemorate [kə'memərеɪt] *v* служить напоминанием, чтить память — B
commuter [kə'mju:tə] *n* пассажир, совершающий регулярные поездки на работу в город из пригорода — C
convert [kən'və:t] *v* превращать, переделывать — T_1
copper ['kɔpə] *n* медь — T_1
countryside ['kʌntrɪsaɪd] *n* сельская местность; округа — D, T_2
county ['kauntɪ] *n* графство (административная единица в Англии); округ (в США) — C
crop [krɔp] *n* 1. урожай; посев; 2. с.-х. культура — C
dairy ['deərɪ] *a* молочный — C
dairy produce молочные продукты

decline [dɪ´klaɪn] *v* уменьшаться; спадать; приходить в упадок C, D
demand [dɪ´mɑ:nd] *n* спрос; потребность T_2
densely [´denslɪ] *adv* густо, плотно C
deposit [dɪ´pɔzɪt] *n* месторождение, залежь D
discovery [dɪs´kʌvərɪ] *n* открытие A
disposal [dɪs´pouzəl] *n* возможность распоряжаться A
domestic [dou´mestɪk] *a* внутренний, отечественный T_2
dual [´dju:əl] *a* двойственный, двойной T_2
employ [ɪm´plɔɪ] *v* предоставлять работу; нанимать A
employment [ɪm´plɔɪmənt] *n* служба, занятие, работа C, T_2
enable [ɪ´neɪbl] *v* давать возможность или право D
encourage [ɪn´kʌrɪdʒ] *v* поощрять, поддерживать B, T_2
engraving [ɪn´greɪvɪŋ] *n* гравюра B
epitomize [ɪ´pɪtəmaɪz] *v* кратко излагать D
equipment [ɪ´kwɪpmənt] *n* оборудование T_1
establish [ɪs´tæblɪʃ] *v* основывать, создавать T_1
exclude [ɪks´klu:d] *v* исключать T_2
extent [ɪks´tent] *n* степень, мера A, T_2
extract [ɪks´trækt] *v* вытаскивать, добывать A
farming [fɑ:mɪŋ] *n* сельское хозяйство B, T_1
fascinating [´fæsɪneɪtɪŋ] *a* обворожительный, очаровательный B
food-stuffs [´fu:dstʌfs] *n* продовольствие, продукты питания T_1
fuel [´fjuəl] *n* топливо, горючее T_2
funding [fʌndɪŋ] *n* вложение денежных средств A
glass-making [glɑ:s ´meɪkɪŋ] *n* стекольное производство B
goods [gudz] *n* товар, товары D, T_1
heavy industry [hevɪ ´ɪndʌstrɪ] тяжелая промышленность C
heritage [´herɪtɪdʒ] *n* наследство; наследие B
household [´haushould] *n* домашнее хозяйство B, T_1
impact [´ɪm´pækt] *n* влияние, воздействие T_2
induce [ɪn´dju:s] *v* вызывать, стимулировать D
inhabitant [ɪn´hæbɪtənt] *n* житель, обитатель C
innovation [ɪnou´veɪʃən] *n* нововведение, новшество T_2
installation [ɪnstə´leɪʃn] *n* установка, устройство, (pl.) сооружения A
interlock [ɪntə´lɔk] *v* соединять(ся), сцеплять(ся) D
internal [ɪn´tə:nl] *a* внутренний T_2
item [´aɪtəm] *n* предмет; вопрос T2
machinery [mə´ʃɪnərɪ] *n* машинное оборудование D, T_1
mainland [´meɪnlənd] *n* 1. материк. 2. большой остров (среди группы небольших) A
manufacture [mænju´fæktʃə] *v* производить, изготовлять T_1, T_2
manufacturing [mænju´fæktʃərɪŋ] *n* 1. производство 2. обрабатывающая промышленность B, C
a промышленный; производственный
mine [maɪn] *n* рудник, шахта A, B, T_1

mining [maɪnɪŋ] *n* горное дело; горная промышленность, разработка месторождений, полезных ископаемых B, T_1
muck [mʌk] *n* грязь (разг.) D
needle [ni:dl] *n* иголка, игла B
numerous [´nju:mərəs] *a* многочисленный B, C
oilfield [´ɔɪlfi:ld] *n* месторождение нефти T_1
operate [´ɔpəreɪt] *v* работать, действовать A
in operation в действии A
paramount [´pærəmaunt] *a* первостепенный T_2
peninsula [pɪ´nɪnsjulə] *n* полуостров C
pin [pɪn] *n* булавка, кнопка B
pipe [paɪp] *v* пускать по трубам A
possess [pə´zes] *v* обладать, владеть T_2
pottery [´pɔtərɪ] *n* гончарное дело B
power [pauə] *n* сила, энергия A, D, T_1, T_2
power-station *n* электростанция
primary [´praɪmərɪ] *a* основной, важнейший, главный A, T_2
proposal [prə´pouzəl] *n* предложение A
prosperity [prɔs´perɪtɪ] *n* процветание, преуспевание B
provision [prə´vɪʒən] *n* снабжение, обеспечение C
purpose [´pə:pəs] *n* намерение, цель D
rail [reɪl] *n* рельс; железнодорожный путь B, T_2
railway [´reɪlweɪ] *n* железная дорога B, T_2
a железнодорожный
raise [reɪz] *a* поднимать A
rapid [´ræpɪd] *a* быстрый, скорый T_1
raw [rɔ:] *a* сырой; необработанный T_1
raw material сырье
reclaim [rɪ´kleɪm] *v* поднимать (целину), утилизировать, использовать C
reduce [rɪdju:s] *v* понижать, уменьшать, сокращать A
reference [´refrəns] *n* ссылка, сноска; упоминание B
remain [rɪ´meɪn] *v* оставаться T_2
replace [rɪ´pleɪs] *v* вернуть, восстановить; заменять A
replacement [rɪ´pleɪsmənt] *n* замещение, замена T_2
represent [reprɪ´zent] *v* представлять; символизировать, означать T_2
reprocess [ri:´prousəs] *v* подвергнуть переработке A
rocky [´rɔkɪ] *a* скалистый, каменистый C
rural [´ruərəl] *a* сельский, деревенский C, D, T_2
safe [seɪf] *a* невредимый, сохранный, в безопасности A
sail [seɪl] *n* парус; парусное судно T_2
scale [skeɪl] *n* масштаб, размер T_1
scissors [´sɪzəz] *n pl* ножницы B
series [´sɪəri:z] *n* (*pl* без изменений) ряд, серия C
service [´sə:vɪs] *n* обслуживание, сервис C
setting [´setɪŋ] *n* окружающая обстановка C
sheep [ʃi:p] *n* (*pl* без изменений) овца, баран C
sheep farming овцеводство C
ship [ʃɪp] *v* грузить, перевозить, отправлять груз T_1

shipbuilding ['ʃɪpbɪldɪŋ] *n* судостроение, кораблестроение	D
shipment ['ʃɪpmənt] *n* погрузка, отправка; перевозка товаров	T_2
smelt [smelt] *v* плавить (руду), расплавлять (металл)	T_1
smuggle ['smʌgl] *v* провозить контрабандой	C
source [sɔːs] *n* источник	A, T_1
spatial ['speɪʃəl] *a* пространственный	T_2
spine [spaɪn] *n* хребет, позвоночный столб	C
spread [spred] *v* простирать(ся); распространяться	T_2
spring (sprang, [sprɪŋ, spræŋ] sprung [sprʌŋ]) *v* брать начало, происходить, возникать	D
steam [stiːm] *n* пар	B
steel [stiːl] *n* сталь	D
stick (stuck, [stɪk, stʌk] stuck) *v* приклеивать(ся)	B
suburbs ['sʌbɜːbz] *pl n* предместья, окрестности	C
sufficient [sə'fɪʃənt] *a* достаточный	A
supply [sə'plaɪ] *v* снабжать, доставлять, поставлять	A
surrounding [sə'raundɪŋ] *a* близлежащий, соседний	C, D
tin-plate ['tɪnpleɪt] *n* белая жесть	T_1
trade [treɪd] *n* 1. занятие, ремесло. 2. торговля	B, C
tremendous [trɪ'mendəs] *a* огромный, громадный	T_2
trigger ['trɪgə] *v* начинать, вызывать	T_2
uniform [juːnɪfɔːm] *a* единообразный; однородный; постоянный	C
unique [juː'niːk] *a* единственный в своем роде; уникальный	T_2
urban [ɜːbən] *a* городской	D
vanish ['vænɪʃ] *v* исчезать, пропадать	B
wagon ['wægən] *v* автофургон	T_2
waste [weɪst] *n* отходы, отбросы	A
water-way ['wɔːtəweɪ] *n* водный путь	C, T_2
wild [waɪld] *a* дикий	C, D
wind-swept [windswept] *a* незащищенный от ветра	D

Section II. READING MATERIAL

TEXT A. BRITAIN'S ENERGY

Task: *read the text; translate it into Russian in written form.*

Britain has the largest energy resources of any country in the European Community and is a major producer of oil, natural gas and coal. Other primary sources of energy are nuclear power and, to a lesser extent, water power.

Before the 1970s Britain depended on imports of oil from abroad but the discovery of large oil and gas reserves in the North Sea changed this dramatically: by 1986 about 2.2 million barrels of oil were extracted per day, making Britain the world's fifth largest producer. There are over thirty offshore oilfields from which oil

and gas are piped to the mainland. Natural gas has replaced coal in the public supply system.

Britain has large reserves of coal, and coal mining played a very important part in the industrial revolution of the eighteenth and nineteenth centuries. By 1913 the coal industry employed over a million workers. Coal is still an important source of heat for both private houses and power stations, but in recent years the industry has greatly reduced the numbers of mines and miners while increasing efficiency. There was a long and bitter industrial dispute in 1984–85 as miners reacted to the beginning of this new phase in the development of the coal industry. Britain has fourteen nuclear power stations in operation. There are other nuclear installations too, such as reprocessing units and research centres. Since the original power stations started operations in 1956 there has been much discussion over the best design; pressurized water reactors are planned for the future and the government's eventual aim is to have 20 per cent of Britain's electricity produced by nuclear power.

All proposals for new power stations meet with public opposition, and this has increased since the disaster at Chernobyl in the Ukraine in 1986. There are fears that the reactors themselves are unsafe, and that the problems of waste disposal have not been solved. While those in favour of nuclear power claim that it is clean, safe and efficient, opponents argue that the dangers are too great and that other sources of energy have not been sufficiently researched because of lack of government funding or interest. The privatization of the electricity industry has also raised the question of who should own and operate nuclear.

EXERCISES

Ex.1. Read the following words and guess their meaning. Mind the stress.

'energy	pro'ducer	Euro'pean
'nuclear	dis'covery	revo'lution
'import	re'serves	insta'llation
'mainland	in'dustrial	elect'ricity
'power	im'port	oppo'sition
'industry	e'fficiency	privati'zation

Ex. 2. Memorize the following pairs of derivatives.

V → N	N → A
to install – installation	industry – industrial
to produce – production	Europe – European
to extract – extraction	nature – natural
to operate – operation	event – eventual
to develop – development	danger – dangerous
to employ – employment	nucleus – nuclear

Ex. 3. Transform as in the models.

Model 1: to reduce the number of mines – the reduction of the number of mines

to produce nuclear power, to employ workers, to discover oil and gas reserves, to depend on imports, to extract coal

Model 2: the centres of research – the research centres

the disposal of waste, the reserves of oil, resources of energy, the installations of nuclear power, the system of public supply

Ex. 4. *Match English and Russian equivalents.*

1. a major producer of oil	a. важный источник тепла
2. to extract per day	b. открытие крупных месторождений нефти и газа
3. the discovery of large oil and gas reserves	c. развитие угольной промышленности
4. to solve the problems of waste disposal	d. иметь в эксплуатации
5. nuclear installations	e. главный производитель нефти
6. the development of coal industry	f. добывать в день
7. to have in operation	g. ядерные установки
8. an important source of heat	h. решать проблемы использования отходов

Ex. 5. *Choose the right word or word combination.*

1. Britain has the largest... resources of any country in the European Community.

a) forest b) energy c) water

2. ... played a very important role in the industrial revolution of the 18th and 19th centuries.

a) coal mining b) shipbuilding c) oil extraction

3. Britain has ... nuclear power stations in operation.

a) four b) forty c) fourteen

4. There are ... that the reactors themselves are unsafe.

a) some hopes b) fears c) some ideas

5. The coal mines ... the numbers of mines and miners.

a) have greatly increased b) have doubled

c) have greatly reduced

Ex. 6. Insert the right words:

(has replaced, depended on, claim, were extracted, are piped, have not been researched, started)

1. Before the 1970s Britain ... imports of oil from abroad.
2. By 1986 2.2 million barrels of oil ... per day.
3. There are over thirty offshore fields from which oil and gas ... to the mainland.
4. There has been much discussion over the best design of power stations since the original ones ... operations in 1956.
5. Those in favour of nuclear power ... that it is clean, safe and efficient.
6. Natural gas ... coal in the public supply system.
7. Opponents of nuclear power argue that the sources of energy ... sufficiently ... .

Ex. 7. Answer the questions on the text.

1. What are the main sources of energy in Britain?
2. Why was Britain dependent on imports of oil from abroad before the 1970s?
3. Britain has the largest energy resources of any country in the European Community, hasn't it?
4. What event has changed the situation in Britain's extraction industry?
5. Why has coal industry reduced the numbers of mines and miners?
6. What new sources of energy appeared?

Ex. 8. Make a short summary of the text.

TEXT B. THE INDUSTRIAL HEART OF ENGLAND

Task: *read the text, find the answers to the questions given below.*

Nearly all the chief towns of the industrial Midlands are close together. They lie in the district which contains the great industrial area of the "Black Country", a reference to the area's industrial heritage.

The real "black" Black Country vanished decades ago with the change from coal and steam to gas and electricity, although the Black Country name has stuck to the region. Here we find numerous factories and coal mines.

Birmingham, Britain's "second city", is the most important town of this district. Because of the great variety of its industries people call it "The City of 1500 Trades". All the pins and needles in English households are probably of Birmingham make. The pens that people write with, the spoons and forks they use for dinner and the glasses which they drink out are mostly the products of Birmingham industry. It is quite possible that motor-cars, the bicycles, the railway-carriages and the rails they run on in England, the radio and television sets, etc., have come from Birmingham.

The chief reason for its prosperity is the fact that it lies on the borders of the "Black Country", which is a very big armament centre too. The neighbouring city of Coventry, one third of which the Germans destroyed by bombs during the war, is the birthplace of the motor manufacturing industry. Another great industrial district is around Wolverhampton. North of Wolverhampton are "the Potteries". On knives and scissors one usually finds the name of Sheffield. To the north of Birmingham you come to Manchester, the cotton centre.

The Black Country's natural resources encouraged the development of a speciality of the region – glass-making. This was brought over from Lorraine in France by noble emigrant families in the 16thC. The history of the Stourbridge glass industry is commemorated in the fascinating Broadfield House Glass Museum. This houses one of the finest collections of glass in the world including cameo glass, continental engraving, English design from the 18thC, 19thC and 20thC.

1. What is the main industrial region of England?
2. Why is it called the "Black Country"?
3. What is the most important city of this region?
4. Why do the people call it "The City of 1500 Trades"?
5. What items of goods does Birmingham produce?
6. Coventry is the birthplace of motor manufacturing industry, isn't it?
7. Where are the "Potteries" situated?
8. What is considered to be a speciality of the Black country?

TEXT C. SOUTHERN ENGLAND

T a s k : *read the text, gét ready to render its contents in Russian.*

The area surrounding the outer suburbs of London has the reputation of being "commuter land". This is the most densely populated area in the UK which does not include a large city, and millions of its inhabitants travel into London to work every day.

Further out from London the region has more of its own distinctive character. The county of Kent, which you pass through when travelling from Dover or the Channel tunnel to London, is known as "the garden of England" because of the many kinds of fruit and vegetables grown there. The Downs, a series of hills in a horseshoe shape to the south of London, arc used for sheep farming (though not as intensively as they used to be). The southern side of the Downs reaches the sea in many places and forms the white cliffs of the south coast. Many retired people live along this coast. Employment in the south-east of England is mainly in trade, the provision of services and light manufacturing. There is little heavy industry. It has therefore not suffered the slow economic decline of many other parts of England.

The region known as "the west country" has an attractive image of rural beauty in British people's minds. There is some industry and one large city (Bristol was once Britain's most important port after London), but farming is more widespread than it is in most other regions. Some parts of the west country are well-known for their dairy produce, such as Devonshire cream, and fruit. The south-west peninsula, with its rocky coast, numerous small bays (once noted for smuggling activities) and wild moorlands such as Exmoor and Dartmoor, is the most popular holiday area in Britain. The winters are so mild in some low-lying parts that it is even possible to grow palm trees, and the tourist industry has coined the phrase "the English Riviera".

East Anglia, to the north-east of London, is also comparatively rural. It is the only region in Britain where there are large expanses of uniformly flat land. This flatness, together with the comparatively dry climate, has made it the main area in the country for the growing of wheat and other arable crops. Part of this region, the area known as the Fens, has been reclaimed from the sea, and much of it still has a very watery, misty feel to it. The Norfolk Broads, for example, are criss-crossed by hundreds of waterways but there are no towns here, so this is a popular area for boating holidays.

TEXT D. NORTHERN ENGLAND

Task: *read the text and say what contributed to the appearance of many towns on both sides of the Pennine mountains and in what way the pattern of settlement in the north of England is different from that in the south.*

The Pennine mountains run up the middle of northern England like a spine. On either side, the large deposits of coal (used to provide power) and iron ore (used to make machinery) enabled these areas to lead the Industrial Revolution in the eighteenth century. On the western side, the Manchester area (connected to the port of Liverpool by canal) became, in the nineteenth century, the world's leading producer of cotton goods; on the eastern side, towns such as Bradford and Leeds became the world's leading producers of woollen goods. Many other towns sprang up on both sides of the Pennines at this time, as a result of the growth of certain auxiliary industries and of coal mining. Further south, Sheffield became a centre for the production of steel goods. Further north, around Newcastle, shipbuilding was the major industry.

In the minds of British people the prototype of the noisy, dirty factory that symbolizes the Industrial Revolution is found in the industrial north. But the achievements of these new industrial towns also induced a feeling of civic pride in their inhabitants and an energetic realism, epitomized by the cliche saying "where there's muck there's brass" (wherever there is dirt, there is money to be made).

The decline in heavy industry in Europe in the second half of the twentieth century has hit the industrial north of England hard. For a long time, the region as a whole has had a level of unemployment significantly above the national average.

The towns on either side of the Pennines are flanked by steep slopes on which it is difficult to build and are surrounded by land which is relatively unsuitable for agricultural purposes. Therefore, the pattern of settlement in the north of England is often different from that in the south. Open and uninhabited countryside is never far away from its cities and towns. The typically industrial landscape and the very rural landscape interlock. The wild, windswept moors which are the setting for Emily Bronte's famous novel *Wuthering Heights* seem a world away from the smoke and grime of urban life – in fact, they are just up the road (about 15 kilometres) from Bradford!

Section III. LEXICAL-GRAMMAR TESTS

Для того, чтобы правильно выполнить контрольные задания, необходимо усвоить следующий грамматический материал:

1. Неличные формы глагола (Subjective – with – the Infinitive Construction, Objective – with – the Infinitive Construction, For – to Infinitive Construction, Participial Constructions).
2. Сослагательное наклонение. Типы условных предложений.
3. Видо-временные формы глаголов действительного и страдательного залогов (повторение).
4. Типы придаточных предложений. Союзное и бессоюзное подчинение.

TEST I

I. Прочтите текст и письменно ответьте на вопросы, следующие за ним.

Australia

1. Until recently, Australia was chiefly interested in the produce she got from farming and mining; these being her main industries. She imported most of the manufactured goods she needed. Now, however, Australia is known to be an important manufacturing country; she makes for herself many of the goods, machinery, chemicals and clothing that she needs.

2. Many raw materials needed for industry are available in the country but it is upon the development of power that Australia has made her rapid industrial expansion. The chief source of power is coal mined in the Sydney Coal Basin, which is considered to be the heart of Australia's manufacturing industry. Coal, converted into coke, is used in great blast furnaces at Newcastle and Port Kembla for the smelting of iron ore, shipped from South Australia. Copper and tin-plate are manufactured at Port Kembla, and Sydney has numerous factories which use electricity generated in coal-burning power stations to manufacture metal goods, chemicals, cloth, electrical equipment, building and household goods and foodstuffs.

3. Melbourne, and other manufacturing centres have similar industries to those of Sidney and also make motorcars and agricultural machinery.

Similar industries on a smaller scale are established on the coal field between Brisbane and Ipswich in Queensland, and at Fremantle, which gets its coal from Western Australia.

4. Hydroelectricity provides an increasing amount of Australia's power, and Tasmania generates more than half of it. Industries requiring much electricity – zinc, aluminium and paper industries, for example, are important in Tasmania.

1. What were the main industries of Australia until recently?
2. Is Australia rich in raw materials?
3. What made Australia's industry develop rapidly?

4. What is considered to be the heart of Australia's manufacturing industry?

5. Tasmania generates more than half of Australia's electricity, doesn't it?

6. What are the most important industrial centres of Australia?

II. Письменно переведите 1-й, 2-й абзацы текста.

III. Выпишите из 1-го абзаца текста предложение с самостоятельным причастным оборотом; из 2-го – с субъектным инфинитивным оборотом.

IV. Раскройте скобки, употребив нужную форму глагола в придаточных условных предложениях.

1. If there (to be) no atmosphere, there would be no clouds, no rain.

2. If we (can live) on one of the other planets such as Mars, the Earth would appear to us as a big star.

3. Most lakes and rivers would dry up if they (to depend) solely upon precipitation for their store water.

V. Переведите следующие предложения, учитывая различия в переводе зависимого и независимого причастных оборотов.

1. The primitive man having discovered the use of fire, the first steps were taken on the road to an industrial civilization.

2. The broad Denmark Strait separating Iceland from Greenland is conditionally considered a boundary between Europe and North America.

3. The major part of Ghana is covered by savannas and forests, the latter occupying more than a quarter of the total area of the country.

4. In the original Greenland culture animals were depicted realistically, emphasis being placed on the characteristics of each species.

VI. Переведите предложения, содержащие инфинитивные конструкции.

1. Coal has been known to exist in Great Britain for many centuries but it is only during the last hundred years that it has been mined on a large scale.

2. Wood was perhaps the first material to be used by man for building purposes.

3. Geologists believe those hot springs to be very rich in mineral salts.

4. The use of terrestrial heat for electric power production seems to be the most realistic and profitable.

5. The solid crust of the Earth is now believed to be only about 30 miles deep.

VII. Раскройте скобки, употребив глагол в нужной видо-временной форме.

1. Men (to use) maps for thousands of years.

2. As years (to pass), men (to learn) more and more about the geography of the world.

3. Holiday travel (to become) more and more popular with every day.

4. After Captain James Cook (to land) on the eastern coast of Australia, the British flag was displayed on the shore.

5. The popularity of the spas (to reach) its height in the 18th century.

VIII. Определите тип подчинения в следующих предложениях. В бессоюзных придаточных отметьте, где может находиться опущенный союз.

1. They settled down in a place which is now the nation's capital Reykjavik meaning "Bay of Smokes" due to the many hot springs.

2. The inhabitants of the island say they have no illiterates.

3. As the earth continued to cool and shrink, some basins appeared.

TEST II

I. Прочтите текст и письменно ответьте на вопросы, следующие за ним.

The Manufacturing Core

1. Manufacturing is an important economic activity in the United States. In spite of the presence of items manufactured outside the country, domestic industry remains paramount, and it is rare for any medium-sized U.S. town to be without at least some local employment in manufacturing.

The northeastern United States, excluding northern New England, is the country's single most significant region of manufacturing. This region is loosely defined on three sides by the Ohio River Valley, Megalopolis, and the southern Great Lakes.

2. In spite of the region's moderate extent and the growth of manufacturing elsewhere, the Manufacturing Core continues to be of tremendous economic significance in American geography. Its factories produce most of the country's steel, as well as a significant percentage of its motor vehicles and motor vehicle parts. Most of the important ports, the main centres of

communication, and the primary financial centres are within or near the region, and the country's political capital being on the immediate margins.

The region includes the two largest clusters of coalescing metropolitan areas: Megalopolis, and the group of large urban regions between Milwaukee (Wisconsin) and Chicago (Illinois) on the west, and Cleveland (Ohio) and Pittsburgh (Pennsylvania) on the east.

3. Understanding America's Manufacturing Core is made difficult by its strongly dual character: the urban and industrial nature of the region's manufacturing centres, and the rural and agricultural character of the territory's small towns and countryside.

The interior portion of America's Manufacturing Core is known to possess great accessibility resources. Connecting the mineral-rich Canadian Shield and the fuel-rich interior plains, the five Great Lakes – Superior, Michigan, Huron, Erie, and Ontario – represent an internal waterway unlike any other in the world.

So this unique combination of spatial and mineral resources and technological changes that affected the manufacturing geography of the United States encouraged the growth of heavy manufacturing industries and all of the related human activities that have come to dominate here.

4. These changes have been grouped by one geographer, John Borchert, into four periods or historical epochs as he called them. He identified the earliest period, 1790–1830, as the Sail-Wagon Epoch. During this period, almost all cities and towns were associated with water transportation.

The second period, 1830–1870, was triggered by development of the railway, a radical innovation in land movement.

The Steel-Railway Epoch, 1870–1920, was stimulated by the development of steel, the replacement of iron rails with stronger and heavier steel rails, increased demand for bituminous coal, and the spread of electric power generation.

A fourth epoch, the period 1920–1960, was the Auto- Air-Amenity Epoch. The main effects of transport innovations such as the automobile and the airplane were to increase individual mobility and to minimize the impact of shipment costs in the production process.

The United States entered yet another period after 1960, one that might be called the Information Technology Epoch.

1. What is one of the most important activities in the United States?

2. What region is called the Manufacturing Core?

3. The region's factories produce most of the country's steel and motor vehicles, don't they?

4. What does the dual character of the region consist in?

5. What are the changes that affected the manufacturing geography of the United States?

II. Письменно переведите 1-й, 4-й абзацы текста.

III. Выпишите из 2-го абзаца текста предложение с самостоятельным причастным оборотом; из 1-го – с инфинитивом в функции подлежащего; из 3-го – с субъектным инфинитивным оборотом.

IV. Раскройте скобки, употребив нужную форму глагола в придаточных условных предложениях.

1. If the ancients (to know) what the earth was really like, they undoubtedly would have named it Oceanus for the tremendous areas of water that cover 70.8 per cent of its surface.

2. If the Earth (to be) as smooth, as, say, an ideal ball bearing, it would be covered by water nearly a mile and a half deep.

3. He (to translate) this article into Russian if he (to get) a dictionary.

V. Переведите следующие предложения, учитывая различия в переводе зависимого и независимого причастных оборотов.

1. The birthrate depends on many factors, some of the most important being socio-economic ones, such as the standards of living and the level of education.

2. At that time the "Iron Ore Railway" was still under construction, steel having been laid only as far north as Mile 250.

3. When burned bituminous coal gives off a dense smoke and leaves a great deal of ash.

4. The south of England has always been more prosperous than the north, the rates of unemployment being lower and houses being more expensive.

5. In Cornwall having the longest coastline of any English county there are 11 outstandingly important light houses.

VI. Переведите предложения, содержащие инфинитивные конструкции.

1. Corn has proven to be an astonishingly versatile industrial material.

2. Europe is forecast to remain the number one region in international tourism.

3. The great heat of the desert causes the air to expand and rise so high.

4. Some scientists believe the moon to be formed by the breaking away of a part of the outer crust of the earth.

5. Life on Earth is believed to have originated in the areas, growing from small molecules of amino acids and nucleotides.

VII. Раскройте скобки, употребив глагол в нужной видо-временной форме.

1. Energy (to be) and (to remain) the foundation of the economy.

2. Many power plants (to build) and more and more electricity (to use).

3. The depth of coal mines (to increase) in the old regions.

4. Early scientists who (to work) with radioactive materials (not to know) how dangerous they (to be).

5. A man (not to believe) that the Sun (to be) the centre of the Solar System.

VIII. Определите тип подчинения в следующих предложениях. В бессоюзных придаточных отметьте, где может находиться опущенный союз.

1. Nobody believed the Titanic could sink.

2. In some countries the law punishes people who throw garbage on the streets, and they usually pay a fine.

3. Much of the country's interior (Australia) is almost rainless, and as a result, most of the people live on the eastern and south-eastern coasts.

Keys

Unit I

Ex.4. 1-c, 2-e, 3-f, 4-a, 5-b, 6-d, 7-h, 8-g.
Ex.5. 1-b, 2-c, 3-b, 4-a, 5-c.

Unit II

Ex.4. 1-h, 2-c, 3-f, 4-j, 5-a, 6-b, 7-i, 8-e, 9-g, 10-d.
Ex.5. 1-b, 2-c, 3-b, 4-a, 5-c.

Unit III

Ex.4. 1-e, 2-f, 3-b, 4-h, 5-g, 6-c, 7-d, 8-a.
Ex.5. 1-b, 2-a, 3-c, 4-b, 5-c.

УСТНАЯ ПРАКТИКА

The United Kingdom of Great Britain and Northern Ireland

The United Kingdom of Great Britain and Northern Ireland is situated on the British Isles. It consists of four parts: England, Wales, Scotland and Northern Ireland. England, Wales and Scotland occupy the territory of Great Britain. Northern Ireland is situated in the northern part of Ireland.

The territory of the United Kingdom is about 244,000 square kilometres, it is the 75th place among other countries in the world. The population is over 56.5 million. About 80% of the population is urban. The capital of the country is London.

The surface of Great Britain varies greatly. The northern and western part of the country is mountainous and is called the Highlands. All the rest (south, east and centre) is a vast plain which is called the Lowlands. The mountains are not very high. The rivers are not long. The most important of them are the Severn and the Thames. There are many beautiful lakes in the mountainous parts of the country.

The mountains, the Atlantic Ocean and the warm waters of the Gulf Stream influence the climate of Great Britain. It is mild the whole year round.

Great Britain is a highly developed industrial country. It is known as one of the world's largest producers and exporters of iron and steel products, machinery and electronics, chemicals and textile, aircraft and navigation equipment. One of the chief industries of the country is shipbuilding.

Great Britain is a country with old cultural traditions and customs. The most famous educational centres are Oxford and Cambridge Universities. They are considered to be the intellectual centres of Europe. The education is not free, it is very expensive.

The United Kingdom is a monarchy and the Queen is the head of the state. But in practice it is ruled by the elected government with the Prime Minister at the head. The British Parliament consists of two chambers: the House of Lords and the House of Commons.