

S.V. Kuzmina, Y.A. Makarikhina

Nature Around Us

Учебное пособие

Part II

САРАТОВСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ ИМЕНИ Н. Г. ЧЕРНЫШЕВСКОГО

С.В. Кузьмина, Е.А. Макарихина

Nature Around Us: Учебное пособие. – Саратов, 2019. – 51 с.

Учебно-методическое пособие «Nature Around Us» предназначено для студентов, обучающихся по естественнонаучным направлениям, изучающих английский язык. Данное пособие представляет собой сборник текстов на естественнонаучную тематику и задания к ним.

Рецензенты:

Кандидат философских наук, доцент кафедры английского языка и межкультурной коммуникации Саратовского государственного университета им. Н.Г. Чернышевского Шилова С.А.

Содержание

Предисловие	4
Deserts	5
Hurricanes and Tropical Storms	10
Volcanoes	13
Stars	17
Nuclear Energy	20
Evolution	24
Geography of Russia Part I	30
Geography of Russia Part II	33
Geography of Russia Part III	37
Geography of Russia Part IV	41
Geography of the United Kingdom	45
Geography of the USA	48
Список использованных источников	51

Предисловие

Настоящее учебно-методическое пособие предназначено для студентов дневного отделения по естественнонаучным направлениям, изучающих английский язык. В нем предоставлены тексты на естественнонаучную тематику и задания к ним.

Тексты приведены по темам: пустыни, ураганы, вулканы, звезды, география России и т.д. К каждому тексту предоставляются задания. Работа с текстом предполагает устный перевод и ответы на вопросы, контролирующие понимание всего текста. Также предоставляются задания, подразумевающие работу с лексикой.

Данное пособие рассчитано, в основном, на устное выполнение всех упражнений. Однако предложенная структура пособия позволяет выполнение заданий письменно и, таким образом, допускается использование пособия в учебном процессе для студентов заочной формы обучения.

Deserts

A desert is a hot area of land that gets very little rain — not more than 200mm a year. Temperatures during the daytime can get as high as 55° C. At night, deserts cool down, sometimes even below 0° C.

Deserts cover about 20% of the world's land. The biggest is the Sahara desert, which is about the same size as Europe.

Because deserts are very dry only certain kinds of plants and animals can live there.

Some deserts are formed in regions that are cut off from the ocean by high mountains. Winds carry wet air from the ocean to the land. When the air climbs over high mountains it loses most of its moisture and when it falls down on the other side it becomes very warm and dry. Deserts on the western coast of North America were formed by such winds.

Many areas have become dry because they are too far away from the ocean. Air loses its moisture by the time it reaches places that are thousands of kilometres from the coast.

Deserts can also develop near the coast. Cold water moves from the Antarctic northwards along the African and South American coast. The warm air in these places cools down and mixes with the cool water. There is a lot of fog, but no rain. That's why the Atacama desert in Chile and the Namib desert in Africa are among the driest deserts in the world.

Landscapes of the desert

Only about 10% of all deserts are made up of sand. Most of them are rocky places that consist of gravel and larger stones. Desert landscapes are formed mostly by the power of the wind and water.

Strong winds form rocks in strange ways. They also build up dunes made of sand. Such dunes can be up to 200m tall and they can travel large distances every year.

After rainy times, small streams carry water. They cut their paths through the desert and carry sediments with them. These streams often end in lakes where the water evaporates and salt and minerals are left over.

Sometimes underground water comes to the surface. Such a place is called an oasis. It is the only spot where people can live, plant crops and raise animals.

Climate of deserts

In summer, temperatures may reach up to 55° C during the daytime, but at night they drop below 0° C.

Most deserts get very little rainfall— on average, not more than 20cm a year. There may be years without any rainfall at all. Sometimes a lot of rain falls during thunderstorms that last for a few hours.

When the desert dries up after heavy rainfall, salt and other minerals are left behind on the ground. Salt lakes are very common in these places. That is why some desert areas have yellow, brown and red colours.

Living in the desert

People who live in deserts must protect themselves from high temperatures during the daytime and low temperatures at night and in the winter.

Some people live in mud houses that are painted white. They keep out the heat during the daytime and protect people from cold evenings. Nomads in Africa live in tents and move around all year in search of areas with water. Many of them wear long coats that protect them from the sun and the wind.

Plant life

Desert plants must change their way of life and get used to the heat and the dryness.

Some flowers only live for a few days. The seeds may be in the desert ground for years and when it rains they start to blossom.

Plants of the desert usually have small leaves that look like needles. Such plants can live with very little water, which they store in the needles or stems. Some plants have long roots that reach up to 80 metres below the surface.

Animals

Many kinds of animals live in the desert: spiders, reptiles, birds and some mammals.

Most animals stay in the shade during the daytime and look for food at night when it gets cooler. They get water from the food they eat or from the water holes in the desert. Some animals sleep during the summer.

Camels are animals that are fit to live in the desert. They can go on for days without drinking water and need only little to eat. They carry their food in their humps. They also give nomads wool and tents are made out of their skin.

The Sahara – the biggest desert in the world

The Sahara is the biggest desert in the world. The landscape is made up of mountain ranges, rocky plateaus and sandy plains called ergs. The Nile is the only river that carries water all year long. It flows through the Sahara in Sudan and Egypt.

The desert reaches from the Atlantic Ocean in the west to the Red Sea in the east – over 3,500km. The highest peaks are in the Tibesti mountains. They reach a height of about 3,500 metres.

There are about 90 bigger oases in the Sahara desert, where water comes up from underground rivers or wells. People here live in small villages and grow crops.

The Sahara also has important raw materials. Oil and gas lie under the Algerian and Libyan desert. There are also other minerals, like copper and iron ore.

About 2 million people live in the desert. Most of them are Arabs or Berbers. The Tuareg are a tribe that live in the mountainous areas of the central Sahara. Most of them are nomads who raise sheep, goats or camels and travel around all year.

In desert oases people can live the whole year. They grow dates, wheat and other crops. But, they must also fight against sand storms and wandering dunes that threaten to cover the oases with sand.

The Sahara was not always a desert. During the Ice Age, when many parts of the world were covered with snow and ice, northern Africa had a much wetter climate. The Sahara had many lakes and rivers and elephants and giraffes lived in the grasslands and forests. At about 5000 BC the climate started to become drier and the Sahara turned into a desert. Many people moved south.

Today the desert is growing because people destroy fertile land. They raise too many animals that eat all the grass or they cut down trees that still exist.

I. Correct the false statements and translate them:

1. A desert is a hot area of land that gets very little rain — not more than 200mm a month.
2. Air finds its moisture by the time it reaches places that are thousands of kilometres from the coast.
3. Desert landscapes are formed mostly by the power of the wind and water.
4. Oasis is a place where underground water comes to the surface.
5. There may be years without any rainfall at all.
6. People who live in deserts must protect themselves from high temperatures during the daytime and at night and in the winter.

II. Give the English for:

1. такого же размера как
2. западное побережье
3. становится прохладнее
4. блуждающие дюны
5. Ледниковый период

III. Give the Russian for:

1. cool down
2. be cut off from the ocean
3. moisture
4. the air climbs over smth and falls down
5. be formed by smth
6. be too far away from the ocean
7. underground water

IV. Answer the questions:

1. What is a desert?
2. What are the temperatures there?
3. What is the size of the Sahara desert?
4. What is called an oasis?
5. Why do desert areas have yellow, brown and red colours?
6. How must people who live in deserts protect themselves from high temperatures?
7. What do you know about plant life in the desert?
8. What can you say about the Sahara during the Ice Age?
9. What do you know about the Sahara nowadays?

Hurricanes and Tropical Storms

Hurricanes are gigantic tropical storms that can be hundreds of kilometers wide. They bring along very strong winds and a lot of rainfall. They often cause flooding near the coasts and sea levels rise.

Hurricanes occur in many parts of the world. In the Pacific Ocean they are called typhoons and in Australia they are willy-willies. In the Atlantic Ocean and the Caribbean Sea they are called hurricanes.

How hurricanes start

Hurricanes are born over tropical oceans, usually during late summer and early autumn. They need two things to get them started: heat and moist air.

During the summer the ocean surface heats up and warm moist air starts to rise. Cool air sinks down to replace it. This creates an area of low pressure.

The rotation of the earth creates winds around the centre of such a low pressure area. In the northern hemisphere the air moves counterclockwise, in the southern part clockwise. Such a system is called a cyclone.

When warm air rises it cools and creates clouds. Soon, thunderstorms form and it starts to rain.

All hurricanes begin as cyclones but not all cyclones become storms or hurricanes. Some die out a few days after they start. They don't have enough energy to become a hurricane. When winds are stronger than 119km an hour a storm officially becomes a hurricane.

Structure of a hurricane

The centre of a hurricane is called the eye, a calm area with little rainfall. It is about 30 to 50km wide. Inside the eye the sea can rise up to one metre because the air moves up.

The eyewall is around the eye. This is an area of thunderstorms, rain and the strongest winds—up to 300km an hour.

Then come long bands of rain clouds that are curved towards the centre of the hurricane.

How hurricanes move

In the northern hemisphere hurricanes normally move in a westward direction and then they turn north and northeast. Their path takes them away from the warm tropical water of the equator. When hurricanes move over colder water or over land they lose a lot of their energy. They slow down and as time goes on, they disperse. In the southern hemisphere their path leads them to the south and southeast.

Hurricane names

When a tropical storm forms over the Caribbean Sea it gets a name. Every year the first storm of the season is given a name that starts with the letter A, the second storm gets a name starting with B and so on.

Years ago only women's names were used for tropical storms. Today male and female names alternate – for example, the first storm is named Alexandra, the second one Billy, then Catherine etc.

Each year new names are used so that you can connect a storm to a certain year.

I. Correct the false statements and translate them:

1. Hurricanes bring along very strong winds and a lot of rainfall.
2. Hurricanes are born over tropical oceans, usually during autumn and winter.
3. They need two things to get them started: heat and cold air.

II. Give the Russian for:

1. counterclockwise
2. rotation of the earth
3. westward direction
4. sea levels rise
5. slow down
6. sink down

III. Give the English for:

1. низкое давление
2. выпадение осадков
3. терять много энергии
4. северное полушарие
5. гроза

IV. Answer the questions:

1. What are hurricanes?
2. What do they often cause?
3. How can hurricanes start?
4. What is called a cyclone?
5. What storm officially becomes a hurricane?
6. What do you know about hurricane names?

Volcanoes

When a volcano erupts hot gases and liquid rock come up to the surface from inside the earth. The material sometimes slides down mountains as lava or is hurled into the air as ash or small rocks. Volcanoes often destroy the land around them completely. Gases from eruptions can keep sunlight from reaching the earth and darken the sky for years. Volcanoes also build up new islands and mountains and make the soil a good place for crops to grow.

Where are volcanoes located?

The earth's crust is made up of sections or plates. They always move and at places where they get together they collide or slide on top of each other.

90% of all volcanoes are located around the edges of the Pacific Ocean. The Pacific coasts of Asia, North America and South America form a big circle, which is called the Ring of Fire.

How volcanoes are formed

Hot liquid rock, called magma, makes up the inner part of the earth. When it rises to the surface it cools down and sometimes the flow of magma stops in the inner part. In other places, magma unites with gas and creates chambers below the surface of the earth. When the gas pressure gets higher, magma becomes lighter and it spews out of openings, cracks or vents at the surface.

Volcanic eruptions

When a volcano erupts three types of material come to the surface: lava, small pieces of rock or ash, and gas.

Magma that spreads out of a volcano slowly is called lava. It can reach temperatures of up to 1,200° C and glows red to white when it flows. In most cases, lava mixes with steam and gas. All types of lava contain silicon and oxygen. As lava moves down a volcano's slope it cools down and becomes harder, creating very rough blocks or rock.

Small pieces of rock erupt from a volcano when magma is trapped inside and cannot get out. Gas pressure in the magma chambers gets high and suddenly material is blown out and thrown high into the sky.

Often, the pieces of rock are so tiny that they form ash or dust. Strong winds can blow volcanic dust hundreds or thousands of kilometers away from the place of eruption.

Types of volcanoes

The two most common types of volcanoes are stratovolcanoes and shield volcanoes.

Stratovolcanoes are formed like a cone. The base is rather flat and they become steeper towards the peak. A crater usually forms at the top of the volcano. Such volcanoes develop when lava and ash come up from the inner part of the earth and build up layers. First, lava spreads over the surface of the volcano, cools down and becomes hard. Then pressure builds up underneath the layers of lava and ash and other materials are blown out. One of the most famous stratovolcanoes is Mount Fuji in Japan.

Shield volcanoes are dome shaped mountains which are flatter than stratovolcanoes and built of lava flows. They may start on the sea floor and become so large that islands can rise far above sea level. The Hawaiian mountains were formed this way. The islands, which rise about 10,000 meters above the ocean floor, are the world's most massive volcanoes.

Volcanoes also create holes, called craters and calderas. Calderas are larger than craters and are formed when parts of the volcano collapse. Sometimes these holes are filled with water and form a lake.

Volcanic activity

Some volcanoes are active. They erupt very often, like Italy's Mount Etna, which erupts every few years. Inactive volcanoes have not erupted for a long time,

but scientists warn that they may become active some day. Extinct volcanoes, like Mount Kenya in Africa, will probably never erupt any more.

Volcano experts do their best to warn the population when a volcano may erupt. Sometimes smaller earthquakes or clouds of gas from vents tell observers that a volcano could erupt soon. Most of the time, however, there are no signs at all.

Effects and benefits of volcanoes

Although volcanoes may cause a lot of damage and big eruptions can kill many people, there are also advantages of volcanic activity.

Volcanic lava and ash spreads over the slopes of mountains and creates good farmland. Volcanic rock is used to build roads, make special tools and ornaments.

The heat that is formed underneath a volcano is called geothermal energy. Hot water that lies below the surface is used to heat homes and greenhouses. Countries with many volcanoes like Japan, Iceland or Italy use this kind of energy to produce electric power.

I. Correct the false statements and translate them:

1. Volcanoes never destroy the land around them completely.
2. When magma rises to the surface it cools down.
3. All extinct volcanoes will erupt one day .

II. Give the Russian for:

1. volcano's slope
2. be trapped inside
3. cool down
4. build up layers

5. lava and ash come up

III. Give the English for:

1. извержение вулкана
2. потухший вулкан
3. преимущества вулканической активности
4. распространяться по поверхности

IV. Answer the questions:

1. What happens when a volcano erupts?
2. What can volcanoes build up?
3. What types of material come to the surface when a volcano erupts?
4. Where are volcanoes located?
5. How are volcanoes formed?
6. What types of volcanoes do you know?
7. What are the advantages of volcanic activity?

Stars

Stars are the most fascinating objects in the sky. They are gigantic balls of gas that people have been interested throughout history. Although they are so big they look small because they are so far away. Humans have always told stories about stars, gave them names and saw patterns in them.

The most important star is the sun. Planets revolve around the centre of the solar system. Our sun is a medium sun, about the same size as most of the other stars in the universe. It consists of hydrogen and helium, which combine to produce energy. This reaction, that makes stars shine so brightly, is called fusion. The temperature on the surface of the sun is about 10,000° C, while the core is thousands of times hotter.

Stars are organized in clusters called galaxies. Our sun, together with the solar system is a part of our galaxy, the Milky Way. It is only one of billions of other galaxies in the universe.

Stars often look so small because they are so far away. The nearest star is Alpha Centauri. It takes light from this star about 4.5 years to reach the earth.

The billions of stars in our universe have different sizes and colors. Some shine yellow like the sun, others are red, white or blue. The color of a star tells us how hot it is. Blue stars are the hottest and red ones the coldest ones. As for size, astronomers speak of giants and dwarfs.

The dimmest stars in the universe are the red dwarfs. They are very small and only have a surface temperature about 3,000° C. Proxima Centauri is such a red dwarf. Although it is as far away as Alpha Centauri we can only see it through a telescope.

The biggest stars in our universe are the blue supergiants. They shine a million times brighter than our sun and have a surface temperature of up to 60,000° C. Because they shine so brightly we can see those that are very far away.

Life cycle of a star

Stars begin as clouds of dust and hydrogen, called nebulas. When they get hot enough they start burning hydrogen and produce energy. This process, called fusion, can last billions of years. When a star runs out of hydrogen the fusion process stops and it starts cooling down.

Most stars become red giants after they have burned away all their hydrogen. The core gets smaller but the temperature increases. The area around the core expands because of the high temperature. When a star gets very big it sometimes explodes. Such an explosion is called a supernova and lasts only for a few days. During this phase stars burn billions of times brighter than they normally do. Sometimes the material of a supernova collapses and turns into a very dense ball of matter called a neutron star. It sends out strong radio waves called pulsars.

Sometimes supernovas have enough energy and mass to collapse inward. They become a black hole. Nothing can escape its gravity and it pulls everything into it. Scientists cannot see a black hole because it has no light. They probably exist in the middle of galaxies.

I. Correct the false statements and translate them:

1. The sun consists of hydrogen and oxygen.
2. The color of a star tells us about its age.
3. Blue stars are the coldest.
4. The dimmest stars in the universe are the blue dwarfs. They are very big.
5. The biggest stars in our universe shine a million times brighter than our sun.

II. Give the Russian for:

1. revolve around the centre

2. be organized in clusters
3. collapse inward
4. burn away all their hydrogen

III. Give the English for:

1. солнечная система
2. Млечный путь
3. галактика
4. черная дыра

V. Answer the questions:

1. What is the most important star?
2. What is fusion?
3. What is the temperature on the surface of the sun?
4. What is the nearest star?
5. What stars are the hottest?
6. What is called a supernova?

Nuclear Energy

Nuclear power gives us about 17% of the world's electricity. Some countries produce more nuclear power than others. France, for example, gets about 75% of its energy from nuclear power plants, the USA only 15%. Many countries, like Austria, don't have any nuclear energy at all.

The energy of atoms

Nuclear energy comes from the energy inside each atom. Atoms are made up of a nucleus with protons and neutrons—and electrons which revolve around the nucleus like the earth goes around the sun.

Nuclear fission

An atom's nucleus can be split apart. When this is done, a lot of energy is released. Albert Einstein, the world's most famous scientist, said that you can get a lot of energy out of a small number of atoms. When it is let out slowly, you can use this energy to produce electricity, but if you let it out all at once, it can cause a great explosion—like in an atomic bomb.

In a nuclear power station uranium atoms are split apart to create energy. Uranium can be found in rocks on earth, but only a special form of uranium—U 235—can be used to make energy. A pound of uranium has the same energy as about 250 000 litres of petrol.

When parts of atoms hit each other they also become radioactive, which is very dangerous if it doesn't stay in the reactor.

Inside a power plant

A nuclear power plant must be safe, otherwise radiation could get into the air. They have a containment - a building around it that is made of concrete and steel. In the core of the reactor uranium is formed into long rods which are put into water. This water cools the rods when they get too hot.

Dangers of nuclear energy

Nuclear power plants have advantages because they produce electricity in a clean way. But there are also many problems:

- Natural uranium cannot be used in power plants. You have to enrich it. This costs a lot of money and is not good for our environment.

- There is the danger of nuclear explosions. The explosion at Chernobyl in 1986 blew up the reactor's containment and tons of radioactive dust were blown into the atmosphere. Many people were killed and millions around the power station had to leave their homes.

- Used uranium stays radioactive for thousands of years. There is no way to store it safely.

- Transporting uranium is very dangerous.

Nuclear fusion

Fusion is the opposite of fission. The nuclei of small atoms are joined to make one bigger atom. The sun uses nuclear fusion of hydrogen atoms to produce light and heat.

Fusion is better than fission because it doesn't create that much radiation and you can use water as fuel.

Nuclear waste

When the uranium in the core of a reactor is used up, you have to take it out. In some cases uranium can be recycled and used again. If you reprocess uranium you can make another dangerous product—plutonium, which is used to make atomic bombs.

But even though uranium can be used again it finally has to be stored safely. Nuclear waste remains radioactive for thousands of years. Even putting it deep into a mountain would not be completely safe.

The future

In the 1950s and 60s we thought that nuclear power was a clean and cheap form of energy. The energy companies thought that nuclear energy would replace coal, oil and gas.

But as time went on and disasters in Three Mile Island and in Chernobyl happened, people around the world saw nuclear energy as a danger. Some countries have already stopped their reactors completely and other are shutting them down in the near future.

The world's worst nuclear disaster — what happened at Chernobyl

On 26th April 1986 the world's worst nuclear disaster took place at the Chernobyl nuclear power station in the northern Ukraine. One of the four reactors exploded because the operators were very careless about safety during a routine test. The explosion blasted a large hole through the roof of the building. Tons of radioactive material were blown up to a height of about 1km. There was also a big fire in the station.

About 100 million curies of radiation escaped from the station into the atmosphere. Most of it fell on the farmland of Belarus and the Ukraine. A lot of fallout also drifted westwards to northern and central Europe.

The people of Chernobyl were exposed to radiation about 100 times greater than from the bomb that was dropped on Hiroshima. Since the accident, many hundred thousand people have become ill, a lot of them have died of cancer or other diseases.

Over 400,000 people had to leave their homes as a result of the explosion. The area around Chernobyl today is a radioactive desert and nobody is allowed to live there.

The population of the Ukraine and Belarus is living in constant danger because the water is still poisoned and the ground on which they plant crops is still radioactive. The children are not allowed to walk in forests, play in parks or pick wild flowers.

I. Correct the false statements and translate them:

1. Nuclear energy comes from the energy of sun.
2. Nuclear waste remains radioactive for hundreds of years.
3. The uranium is used to make atomic bombs.
4. The people of Chernobyl were exposed to radiation about 10 times greater than from the bomb that was dropped on Hiroshima.

II. Give the Russian for:

1. be made up of a nucleus
2. be split apart
3. uranium can be found
4. be formed into long rods

III. Give the English for:

1. ядерные отходы
2. худшая катастрофа
3. осадки переместились в Северную Европу
4. подвергаться облучению

IV. Answer the questions:

1. What happens when parts of atoms hit each other?
2. What is a containment?
3. How can you make another dangerous product—plutonium?
4. Why is the population of the Ukraine and Belarus living in constant danger?
5. Why isn't it allowed to live in the area around Chernobyl today?

Evolution

Why do human beings look a bit like monkey or apes? Why are dolphins good swimmers? Why do giraffes have long necks? The answer to all these questions is evolution. Evolution is the way life changes through time.

All living things are connected together like branches in a tree. Plants and animals are related to one another through their ancestors. For example, we share a common ancestor with gorillas, dogs or even mushrooms.

Evolution shows us how and why all living things change over a certain period of time.

Evidence of evolution

We cannot watch changes in life directly. They take place over thousands or millions of years. However, scientists cannot find proof that these changes have taken place. Important evidence for evolution comes from fossils, the leftovers of ancient life. When animals or plants die they are pressed into sand or clay. Over millions of years rocks are formed.

Scientists have found out that different fossils are found in rocks of different ages. For example, the oldest rocks of our earth are about 3.8 billion years old. They contain no fossils because there was probably no life at that time. Fossils of bacteria appear in rocks that are about 3.5 billion years old. Fish, reptile and mammal fossils appear in younger rocks. Human fossils are found only in the youngest and highest rock layers.

Fossils also show that certain groups of animals have evolved from other groups. Amphibians evolved from fish that could breathe air and move on land. They had legs but also scales and a fin.

Birds probably evolved from dinosaurs. The archaeopteryx was an animal that had feathers like a bird and could fly. It also had teeth, claws on its wings and a skeleton that looked like a meat-eating dinosaur.

Living creatures might also have structures that they have inherited from an ancestor but have become useless. They don't need them any more. Pythons, for example, have the remains of back leg bones, but snakes do not have such legs. The appendix was used by animals that ate only plants but in our bodies these organs have become useless.

The way in which different species occur all over the world also gives us evidence for evolution. Similar species, for example, are found together in certain areas. All types of kangaroos are found in Australia. This is because the kangaroos' ancestors also lived there.

Plants and animals do not always live in ideal places. Tropical ocean islands, for example, are ideal places for frogs to live, but no frogs are found there. This is because the frogs' ancestors lived on the mainland and could not get to ocean islands far away.

How evolution happens

Natural selection

Although we are all human beings, each one of us is different. We all belong to the same species but there are never two people on earth who are exactly the same. We are like our parents because we inherit certain features from them.

Because there is not always enough food for animals and plants to eat they compete against each other in order to survive. Some individuals are better than others because they have certain advantages. On average, those that are better or stronger will survive. The advantages that they have are then passed on to their children and as time goes on these characteristics will be passed on to the whole species. We call this natural selection.

Example: In 1977 no rain fell on the Galapagos Islands. Food became very scarce and many of the island's finches died. They normally ate small seeds that were lying on the ground. Biologists observed that finches with larger beaks were able to survive because they could eat larger and harder seeds that finches with

smaller beaks couldn't open. In the fight for food large-beaked birds had a great advantage. After the drought ended biologists found out that the next generations of finches were larger than the ones before.

Genetics and inheritance

Today, scientists know that a molecule called DNA has all the information which controls the way life will develop. This information is stored in genes and the structure of genes is called the genetic code.

When a male and female have children the male sperm and the female egg join together to a single cell with two genetic codes, one set from the mother and one set from the father. A baby then develops from this cell. This is how we get certain features from our parents.

Sometimes parts of the genetic code change by accident. We call this mutation. Some mutations in genes are dangerous, others may be an advantage. In the example of the birds, the larger beaks were a mutation that was good for the whole species.

Adaptation

Sometimes animals and plants fit beautifully into the world around them. The Arctic fox, for example, is adapted to the polar ice in the far north. It has a thick fur that helps it stay warm and the white colour makes it harder for enemies to see. With its hairy feet it can walk more easily in the snow.

Giraffes also got used to the world they live in. Ancient giraffes normally did not have long necks, but those that did were able to find more food because they could reach the leaves of the trees. Longer-necked giraffes had more babies than others and as a result they developed into the tallest land animals in the world.

Adaptations can cause plants or animals to look alike even if they are not closely related. The bodies of sharks and dolphins are similar, but the shark is a fish and the dolphin a mammal.

Speciation

Speciation happens when one species divides itself into two or more new species. This happens, for example, when the same group of animals or plants live in different places. Sometimes species migrate to new habitats. In other cases a population may be divided by natural disasters like floods or volcanic eruptions.

When species are separated they don't have contact with each other any more and they develop in separate ways. As time goes on the two groups become more and more different, simply because they live in different habitats maybe with more or less food or a hotter or cooler climate. If they get together again they cannot have babies any more because they are completely different.

Speed of evolution

How fast does evolution happen? Sometimes it occurs very quickly. In only a few decades insects evolved that were able to survive insecticides. Viruses also develop quickly. The AIDS virus was unknown before the 1980s.

Some animals evolve very slowly for millions of years and then change occurs very quickly.

Human evolution

Fossils show that many species which are now extinct belong to the same family as we humans do— Homo Sapiens. The oldest members of this family are primates that lived in Africa a few million years ago. They were able to walk upright and had a brain that was a bit bigger than that of an ape.

Charles Darwin

Charles Darwin was an English scientist who studied nature. In his famous book "On the Origin of Species" he claimed that all living plants and animals developed from earlier forms of life.

Darwin was born in England in 1809. His father was a doctor and his mother died when he was 8 years old. Although Darwin was interested in nature, he was sent to a university to study medicine, but he didn't do well there.

In 1831 Charles Darwin was invited to sail on the HMS Beagle to study natural history. The voyage lasted for five years and took Darwin to the Galapagos Islands and other places on the western coast of South America. There he studied fossils in old rocks and noticed that there was a connection between them and plant and animal life. As time went on he developed his theory of natural selection. Those plants and animals that fit better into their environment can survive better and produce more offspring.

When his book was published it caused a lot of discussion but in a short time it was accepted by scientists around the world.

I. Correct the false statements and translate them:

1. We share a common ancestor with gorillas, dogs or even trees.
2. Today, scientists know that a molecule called DNA had all the information which controlled the way life developed many years ago.
3. The bodies of sharks and dolphins are different because the shark is a fish and the dolphin a mammal.
4. Charles Darwin was an American scientist who studied history.

II. Give the English for:

1. предок, прародитель
2. наследовать определенные черты
3. естественный отбор
4. генетический код

III. Give the Russian for:

1. very scarce
2. large-beaked birds
3. speciation
4. to walk upright

5. fossils in old rocks
6. to look alike

IV. Answer the questions:

1. What does evolution show us?
2. What is mutation?
3. How is the Arctic fox adapted to the polar ice?
4. What do you know about ancient giraffes?
5. How fast does evolution happen?

САРАТОВСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ ИМЕНИ Н. Г. ЧЕРНЫШЕВСКОГО

Geography of Russia

Part I

The geography of Russia describes the geographic features of Russia, a country extending over much of northern Eurasia. Comprising much of eastern Europe and northern Asia, it is the world's largest country in total area. Due to its size, Russia displays both monotony and diversity. As with its topography, its climates, vegetation, and soils span vast distances. From north to south the East European Plain is clad sequentially in tundra, coniferous forest (taiga), mixed and broadleaf forests, grassland (steppe), and semi-desert (fringing the Caspian Sea) as the changes in vegetation reflect the changes in climate. Siberia supports a similar sequence but is predominantly taiga. The country contains forty UNESCO biosphere reserves.

Global position and boundaries

Russia on the globe.

Located in the north, west and east latitudes of the Northern Hemisphere, most of Russia is much closer to the North Pole than to the equator. The country's 17.09 million square kilometers include one-eighth of the Earth's inhabited land area. Its European portion, which occupies a substantial part of continental Europe, is home to most of Russia's industrial activity and is where, roughly between the Dnieper River and the Ural Mountains, the Russian Empire took shape. Russia includes the entire northern portion of Asia.

From west to east, the country stretches from Kaliningrad (the exclave separated by the 1990 secession of Lithuania from the then-Soviet Union) to Ratmanov Island (one of the Diomed Islands) in the Bering Strait. This distance spanning about 6,800 kilometres, to Nome, Alaska. From north to south, the country ranges from the northern tip of the Russian Arctic islands at Franz Josef Land to the southern tip of the Republic of Dagestan on the Caspian Sea, spanning about 4,500 kilometres of extremely varied, often inhospitable terrain.

Extending for 57,792 kilometres, the Russian border is the world's longest. Along the 20,139-kilometer land frontier, Russia has boundaries with 14 countries: Norway, Finland, Estonia, Latvia, Lithuania, Poland (via the Kaliningrad Oblast), Belarus, Ukraine, Georgia, Azerbaijan, Kazakhstan, Mongolia, the People's Republic of China and North Korea.

Approximately two-thirds of the frontier is bounded by seawater. Virtually all of the lengthy northern coast is well above the Arctic Circle; except for the port of Murmansk—which receives currents that are somewhat warmer than would be expected at that latitude, due to the effects of the Gulf Stream—that coast is locked in ice much of the year. Thirteen seas and parts of three oceans—the Arctic, Atlantic, and Pacific—wash Russian shores.

Russia shares a maritime boundary with the United States and with Japan.

Geographers traditionally divide the vast territory of Russia into five natural zones: the tundra zone; the taiga, or forest, zone; the steppe, or plains, zone; the arid zone; and the mountain zone. Most of Russia consists of two plains (the East European Plain and the West Siberian Plain), two lowlands (the North Siberian and the Kolyma, in far northeastern Siberia), two plateaus (the Central Siberian Plateau and the Lena Plateau to its east), and a series of mountainous areas mainly concentrated in the extreme northeast or extending intermittently along the southern border.

I. Correct the false statements and translate them:

1. Due to its population, Russia displays both monotony and diversity.
2. Russian climates, vegetation, and soils span small distances.
3. The country contains fifty UNESCO biosphere reserves.
4. Its European portion, which occupies a substantial part of continental Europe, is home to most of Russia's political activity.
5. Russia includes the entire southern portion of Asia.

6. Russia has boundaries with sixteen countries.

II. Give the English for:

простира́ться

обши́рный

граница

местно́сть

прибли́зительно

III. Give the Russian for:

feature

due to

reflect

inhabited land area

stretch

current

IV. Answer the questions:

1. What does Russia display, due to its size?
2. How is the East European Plain clad from north to south?
3. What is the area of the country?
4. Where did the Russian Empire take shape?
5. How many countries does Russia have boundaries with?

Geography of Russia

Part II

Ecoregions

East European plain

The East European Plain encompasses most of European Russia. The West Siberian Plain, which is the world's largest, extends east from the Urals to the Yenisei River. Because the terrain and vegetation are relatively uniform in each of the natural zones, Russia presents an illusion of uniformity. Nevertheless, Russian territory contains all the major vegetation zones of the world except a tropical rain forest.

Icecaps

The Russian Arctic stretches for close to 7,000 kilometres west to east, from Karelia and the Kola Peninsula to Nenetsia, the Gulf of Ob, the Taymyr Peninsula and the Chukchi Peninsula (Kolyma, Anadyr River, Cape Dezhnev). Russian islands and archipelagos in the Arctic Sea include Novaya Zemlya, Severnaya Zemlya, and the New Siberian Islands.

About 57 percent of Russia is tundra—a treeless, marshy plain. The tundra is Russia's northernmost zone, stretching from the Finnish border in the west to the Bering Strait in the east, then running south along the Pacific coast to the northern Kamchatka Peninsula. The zone is known for its herds of wild reindeer, for so-called white nights (dusk at midnight, dawn shortly thereafter) in summer, and for days of total darkness in winter. The long, harsh winters and lack of sunshine allow only mosses, lichens, and dwarf willows and shrubs to sprout low above the barren permafrost. Although several powerful Siberian rivers traverse this zone as they flow northward to the Arctic Ocean, partial and intermittent thawing hamper drainage of the numerous lakes, ponds, and swamps of the tundra. Frost weathering is the most important physical process here, gradually shaping a landscape that was severely modified by glaciation in the last ice age. Less than one percent of Russia's population lives in this zone. The fishing and port industries of the

northwestern Kola Peninsula and the huge oil and gas fields of northwestern Siberia are the largest employers in the tundra.

Taiga

Taiga - the most extensive natural area of Russia - stretches from the western borders of Russia to the Pacific. It occupies the territory of the Eastern Europe and West Siberian plains to the north of 56 ° -58 ° N and most of the territory east of Yenisei River taiga forests reach the southern borders of Russia in Siberia taiga only accounts for over 60% of Russia. In the north-south direction the eastern taiga is divided (east of the Yenisei River), with a continental climate, and west, with a milder climate, in general, the climate zone is moist, moderately warm (cool in the north) in the summer and harsh winter, there is a steady snow cover in the winter. In the latitudinal direction the taiga is divided into three subzones - northern, middle and southern taiga. In the western taiga dense spruce and fir forests on wetlands alternate with pine forests, shrubs and meadows on the lighter soils. Such vegetation is typical of the eastern taiga, but it plays an important role not fir and larch. Within the taiga are widespread fur-bearing animals.

Russian Taiga has the world's largest reserves of coniferous wood, but from year to year - as a result of intensive logging - they decrease.

Mixed and deciduous forests

The mixed and deciduous forest belt is triangular, widest along the western border and narrower towards the Ural Mountains. The main trees are Oak and Spruce, but many other growths of vegetation such as ash, aspen, birch, hornbeam, maple, and pine reside there. Separating the taiga from the wooded steppe is a narrow belt of birch and aspen woodland located east of the Urals as far as the Altay Mountains. Much of the forested zone has been cleared for agriculture, especially in European Russia. Wildlife is more scarce as a result of this, but the roe deer, wolf, fox, and squirrel are very common.

Steppe

The steppe has long been depicted as the typical Russian landscape. It is a broad band of treeless, grassy plains, interrupted by mountain ranges, extending

from Hungary across Ukraine, southern Russia, and Kazakhstan before ending in Manchuria. Most of the Soviet Union's steppe zone was located in the Ukrainian and Kazakh republics; the much smaller Russian steppe is located mainly between those nations, extending southward between the Black and Caspian Seas before blending into the increasingly desiccated territory of the Republic of Kalmykia. In a country of extremes, the steppe zone provides the most favorable conditions for human settlement and agriculture because of its moderate temperatures and normally adequate levels of sunshine and moisture. Even here, however, agricultural yields are sometimes adversely affected by unpredictable levels of precipitation and occasional catastrophic droughts. The soil is very dry.

I. Correct the false statements and translate them:

1. Russian territory contains all the major vegetation zones of the world.
2. The tundra is known for its herds of domestic reindeer.
3. Big part of Russia's population lives in the tundra.
4. Russian Taiga has the world's largest reserves of deciduous wood.
5. The taiga has long been depicted as the typical Russian landscape.
6. The steppe zone provides the worst conditions for human settlement and agriculture because of its cold temperatures.

II. Give the English for:

олень

многочисленный

направление

луг

хвойный лес

III. Give the Russian for:

encompass

lack of smth

permafrost

extensive

moist

deciduous forest

IV. Answer the questions:

1. Where does the West Siberian Plain extend?
2. Why does Russia present an illusion of uniformity?
3. What is tundra known for?
4. What territory does taiga occupy?
5. Why does the steppe zone provide the most favorable conditions for human settlement and agriculture?

Geography of Russia

Part III

Topography

Russia's mountain ranges are located principally along its continental dip (the Ural Mountains), along the southwestern border (the Caucasus), along the border with Mongolia (the eastern and western Sayan Mountains and the western extremity of the Altay Mountains), and in eastern Siberia (a complex system of ranges in the northeastern corner of the country and forming the spine of the Kamchatka Peninsula, and lesser mountains extending along the Sea of Okhotsk and the Sea of Japan). Russia has nine major mountain ranges. In general, the eastern half of the country is much more mountainous than the western half, the interior of which is dominated by low plains. The traditional dividing line between the east and the west is the Yenisei River valley. In delineating the western edge of the Central Siberian Plateau from the West Siberian Plain, the Yenisey runs from near the Mongolian border northward into the Arctic Ocean west of the Taymyr Peninsula.

Ural Mountains

The Ural Mountains form the natural boundary between Europe and Asia; the range extends about 2,100 kilometres from the Arctic Ocean to the northern border of Kazakhstan. Several low passes provide major transportation routes through the Urals eastward from Europe. The highest peak, Mount Narodnaya, is 1,894 metres. The Urals also contain valuable deposits of minerals.

West Siberian plain

To the east of the Urals is the West Siberian Plain, stretching about 6 kilometers from west to east and about 670 kilometers from north to south. With more than half its territory below 200 meters in elevation, the plain contains some of the world's largest swamps and floodplains. Most of the plain's population lives in the drier section south of 77 north latitude.

Central Siberian plateau

The region directly east of the West Siberian Plain is the Central Siberian Plateau, which extends eastward from the Yenisei River valley to the Lena River valley. The region is divided into several plateaus, with elevations ranging between 320 and 740 meters; the highest elevation is about 1,800 meters, in the northern Putoran Mountains. The plain is bounded on the south by the Baikal Mountains system and on the north by the North Siberian Lowland, an extension of the West Siberian Plain extending into the Taymyr Peninsula on the Arctic Ocean.

Altay Mountains

In the mountain system west of Lake Baikal in south-central Siberia, the highest elevations are 3,300 meters in the Western Sayan, 3,200 meters in the Eastern Sayan, and 4,500 meters at Belukha Mountain in the Altay Mountains. The Eastern Sayan reach nearly to the southern shore of Lake Baikal; at the lake, there is an elevation difference of more than 4,500 meters between the nearest mountain, 2,840 meters high, and the deepest part of the lake, which is 1,700 meters below sea level. The mountain systems east of Lake Baikal are lower, forming a complex of minor ranges and valleys that reaches from the lake to the Pacific coast. The maximum height of the Stanovoy Range, which runs west to east from northern Lake Baikal to the Sea of Okhotsk, is 2,550 meters. To the south of that range is southeastern Siberia, whose mountains reach 800 meters. Across the Strait of Tartary from that region is Sakhalin Island, Russia's largest island, where the highest elevation is about 1,700 meters. The small Moneron Island is found to its west.

Caucasus Mountains

Truly alpine terrain appears in the southern mountain ranges. Between the Black and Caspian seas, the Caucasus Mountains rise to impressive heights, forming a boundary between Europe and Asia. One of the peaks, Mount Elbrus, is the highest point in Europe, at 5,642 meters. The geological structure of the Caucasus extends to the northwest as the Crimean and Carpathian Mountains and southeastward into Central Asia as the Tian Shan and Pamirs. The Caucasus

Mountains create an imposing natural barrier between Russia and its neighbors to the southwest, Georgia and Azerbaijan.

Northeast Siberia and Kamchatka

Northeastern Siberia, north of the Stanovoy Range, is an extremely mountainous region. The long Kamchatka Peninsula, which juts southward into the Sea of Okhotsk, includes many volcanic peaks, some of which are still active. The highest is the 4,750-meter Klyuchevskaya Sopka, the highest point in the Russian Far East. The volcanic chain continues from the southern tip of Kamchatka southward through the Kuril Islands chain and into Japan. Kamchatka also is one of Russia's two centers of seismic activity (the other is the Caucasus). In 1995, a major earthquake largely destroyed the oil-processing town of Neftegorsk. Also located in this region is the very large Beyenchime-Salaatin crater.

I. Correct the false statements and translate them:

1. Russia has eight major mountain ranges.
2. The traditional dividing line between the south and the north is the Yenisei River valley.
3. The West Siberian Plain contains some of the world's largest lakes.
4. Sakhalin Island is Russia's smallest island.
5. The Caucasus Mountains create an imposing natural barrier between Russia and its neighbors to the southeast.
6. The long Kamchatka Peninsula includes many volcanic peaks, all of which are still active.

II. Give the English for:

в общем

транспортные маршруты

берег

III. Give the Russian for:

range

valuable deposits of minerals

elevation

an imposing natural barrier

volcanic chain

earthquake

IV. Answer the questions:

1. Where are Russia's mountain ranges principally located?
2. How many major mountain ranges does Russia have?
3. What is the traditional dividing line between the east and the west?
4. What forms the natural boundary between Europe and Asia?
5. Which region is extremely mountainous?

Geography of Russia

Part IV

Drainage

Russia is a water-rich country, divided into twenty watershed districts. The earliest settlements in the country sprang up along the rivers, where most of the urban population continues to live. The Volga, Europe's longest river, is by far Russia's most important commercial waterway. Four of the country's thirteen largest cities are located on its banks: Nizhny Novgorod, Samara, Kazan, and Volgograd. The Kama River, which flows west from the southern Urals to join the Volga in the Republic of Tatarstan, is a second key European water system whose banks are densely populated.

Russia has thousands of rivers and inland bodies of water, providing it with one of the world's largest surface-water resources. However, most of Russia's rivers and streams belong to the Arctic drainage basin, which lies mainly in Siberia but also includes part of European Russia. Altogether, 84 percent of Russia's surface water is located east of the Urals in rivers flowing through sparsely populated territory and into the Arctic and Pacific oceans. In contrast, areas with the highest concentrations of population, and therefore the highest demand for water supplies, tend to have the warmest climates and highest rates of evaporation. As a result, densely populated areas such as the Don and Kuban River basins north of the Caucasus have barely adequate (or in some cases inadequate) water resources.

Forty of Russia's rivers longer than 1,000 kilometers are east of the Urals, including the three major rivers that drain Siberia as they flow northward to the Arctic Ocean: the Irtysh-Ob system (totaling 5,380 kilometers), the Yenisei (4,000 kilometers), and the Lena (3,630 kilometers). The basins of those river systems cover about eight million square kilometers, discharging nearly 50,000 cubic meters of water per second into the Arctic Ocean. The northward flow of these rivers means that source areas thaw before the areas downstream, creating vast

swamps such as the 48,000-square-kilometer Vasyugan Swamp in the center of the West Siberian Plain. The same is true of other river systems, including the Pechora and the Northern Dvina in Europe and the Kolyma and the Indigirka in Siberia. Approximately 10 percent of Russian territory is classified as swampland.

A number of other rivers drain Siberia from eastern mountain ranges into the Pacific Ocean. The Amur River and its main tributary, the Ussuri, form a long stretch of the winding boundary between Russia and China. The Amur system drains most of southeastern Siberia. Three basins drain European Russia. The Dnieper, which flows mainly through Belarus and Ukraine, has its headwaters in the hills west of Moscow. The 1,860-kilometer Don originates in the Central Russian Upland south of Moscow and then flows into the Sea of Azov and the Black Sea at Rostov-on-Don. The Volga is the third and by far the largest of the European systems, rising in the Valdai Hills west of Moscow and meandering southeastward for 3,510 kilometers before emptying into the Caspian Sea. Altogether, the Volga system drains about 1.4 million square kilometers. Linked by several canals, European Russia's rivers long have been a vital transportation system; the Volga system still carries two-thirds of Russia's inland water traffic.

Russia's inland bodies of water are chiefly a legacy of extensive glaciation. In European Russia, the largest lakes are Ladoga and Onega northeast of Saint Petersburg, Lake Peipus on the Estonian border, and the Rybinsk Reservoir north of Moscow. Smaller man-made reservoirs, 160 to 320 kilometers long, are on the Don, the Kama, and the Volga rivers. Many large reservoirs also have been constructed on the Siberian rivers; the Bratsk Reservoir northwest of Lake Baikal is one of the world's largest.

The most prominent of Russia's bodies of fresh water is Lake Baikal, the world's deepest and most capacious freshwater lake. Lake Baikal alone holds 85% of the freshwater resources of the lakes in Russia and 20% of the world's total. It extends 632 kilometers in length and 59 kilometers across at its widest point. Its maximum depth is 1,713 meters. Numerous smaller lakes dot the northern regions of the European and Siberian plains. The largest of these are lakes Belozero,

Topozero, Vygozero, and Ilmen in the European northwest and Lake Chany in southwestern Siberia.

I. Correct the false statements and translate them:

1. Five of the country's thirteen largest cities are located on the banks of the Volga.
2. Banks of the Kama River are sparsely populated.
3. Densely populated areas such as the Don and Kuban River basins north of the Caucasus have large water resources.
4. The Amur River and its main tributary, the Ussuri, form a short stretch of the winding boundary between Russia and China.
5. The Don system still carries two-thirds of Russia's inland water traffic.
6. Numerous smaller lakes dot the southern regions of the European and Siberian plains.

II. Give the English for:

испарение

болото

жизненно важный

вместительный

III. Give the Russian for:

settlement

waterway

densely populated

drainage basin

extensive glaciation

prominent

IV. Answer the questions:

1. Where did the earliest settlements in Russia spring up?
2. What river is Russia's most important commercial waterway?
3. Where is 84 percent of Russia's surface water located?
4. Where are vast swamps located?

САРАТОВСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ ИМЕНИ Н. Г. ЧЕРНЫШЕВСКОГО

Geography of the United Kingdom

The United Kingdom is a sovereign state located off the north-western coast of continental Europe. With a total area of approximately 248,532 square kilometres, the UK occupies the major part of the British Isles archipelago and includes the island of Great Britain, the north-eastern one-sixth of the island of Ireland and many smaller surrounding islands.

The UK lies between the North Atlantic and the North Sea, and comes within 35 km of the north-west coast of France, from which it is separated by the English Channel. It shares a 499 km international land boundary with the Republic of Ireland. The Channel Tunnel bored beneath the English Channel, now links the UK with France.

Area

The total area of the United Kingdom according to the Office for National Statistics is 248,532 square kilometres, comprising the island of Great Britain, the northeastern one-sixth of the island of Ireland (Northern Ireland) and many smaller islands. England is the largest country of the United Kingdom, at 132,938 square kilometres accounting for just over half the total area of the UK. Scotland at 80,239 square kilometres, is second largest, accounting for about a third of the area of the UK. Wales and Northern Ireland are much smaller, covering 21,225 and 14,130 square kilometres respectively.

Physical geography

The physical geography of the UK varies greatly. England consists of mostly lowland terrain, with upland or mountainous terrain only found north-west of the Tees-Exe line. The upland areas include the Lake District, the Pennines, North York Moors, Exmoor and Dartmoor. The lowland areas are typically traversed by ranges of low hills, frequently composed of chalk, and flat plains. Scotland is the most mountainous country in the UK. The faultline separates the two distinctively different regions of the Highlands to the north and west, and the Lowlands to the

south and east. The Highlands are predominantly mountainous, containing the majority of Scotland's mountainous landscape, while the Lowlands contain flatter land, especially across the Central Lowlands, with upland and mountainous terrain located at the Southern Uplands. Wales is mostly mountainous, though south Wales is less mountainous than north and mid Wales. Northern Ireland consists of mostly hilly landscape.

The overall geomorphology of the UK was shaped by a combination of forces including tectonics and climate change, in particular glaciation in northern and western areas.

The tallest mountain in the UK (and British Isles) is Ben Nevis, in the Grampian Mountains, Scotland. The longest river is the River Severn which flows from Wales into England. The largest lake by surface area is Lough Neagh in Northern Ireland, though Scotland's Loch Ness has the largest volume.

Climate

The climate of the UK is generally temperate, although significant local variation occurs, particularly as a result of altitude and distance from the coast. In general the south of the country is warmer than the north, and the west wetter than the east. Due to the warming influence of the Gulf Stream, the UK is significantly warmer than some other locations at similar latitude, such as Newfoundland.

The prevailing winds are southwesterly, from the North Atlantic Current. More than 50% of the days are overcast. There are few natural hazards, although there can be strong winds and floods, especially in winter.

I. Correct the false statements and translate them:

1. The UK occupies the small part of the British Isles archipelago.
2. The UK is separated from France by the French Channel.
3. Wales is the smallest country of the United Kingdom.

4. The physical geography of the UK almost doesn't vary.
5. Northern Ireland consists of mostly mountainous terrain.
6. Due to the cooling influence of the Gulf Stream, the UK is significantly colder than some other locations at similar latitude.

II. Give the English for:

соединять

включать, охватывать

равнина

плоский

значительный

III. Give the Russian for:

surrounding

approximately

account

terrain

traverse

faultline

IV. Answer the questions:

1. Where is the United Kingdom located?
2. What country does it share an international land boundary with?
3. What can you say about the physical geography of the UK?
4. What is the tallest mountain in the UK and the longest river and where are they located?
5. What can you say about the climate of the UK?

Geography of the USA

The United States of America is the world's third largest country in size and nearly the third largest in terms of population. Located in North America, the country is bordered on the west by the Pacific Ocean and to the east by the Atlantic Ocean. Along the northern border is Canada and the southern border is Mexico. There are 50 states and the District of Columbia.

Throughout its history, the United States has been a nation of immigrants. The population is diverse with people from all over the world seeking refuge and a better way of life.

The country is divided into six regions: New England, the mid-Atlantic, the South, the Midwest, the Southwest, and the West. European settlers came to New England in search of religious freedom. These states are Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

The mid-Atlantic region includes Delaware, Maryland, New Jersey, New York, Pennsylvania, and the city of Washington, D.C. These industrial areas attracted millions of European immigrants and gave rise to some of the East Coast's largest cities: New York, Baltimore, and Philadelphia.

The South includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia, all of which struggled after the Civil War, which lasted from 1860-1865.

The Midwest is home to the country's agricultural base and is called the "nation's breadbasket." The region comprises the states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

The Southwest is a beautiful stark landscape of prairie and desert. The states of Arizona, New Mexico, Oklahoma, and Texas are considered the Southwest and are home to some of the world's great natural marvels, including the Grand Canyon and Carlsbad Caverns.

The American West, home of rolling plains and the cowboy, is a symbol of the pioneering spirit of the United States. The West is diverse, ranging from endless wilderness to barren desert, coral reefs to Arctic tundra, Hollywood to Yellowstone. The states of the West include Alaska, Colorado, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

I. Correct the false statements and translate them:

1. The United States of America is the second largest country in the world by population.
2. The population is diverse with people only from Europe.
3. The country is divided into five regions.
4. Industrial areas attracted millions of Chinese immigrants.
5. The Grand Canyon is located in the Midwest.

II. Give the English for:

состоять из

разнообразный

бесплодная пустыня

поселенец

III. Give the Russian for:

varied

rugged

semiarid

stark landscape

marvel

refuge

IV. Answer the questions:

1. What can you say about the location of the USA?
2. What can you say about the population of the USA?
3. Where did European settlers come?
4. In what region are some of the East Coast's largest cities located?
5. What states does the South include?
6. What region is home to the country's agricultural base?
7. What states are home to some of the world's great natural marvels?
8. Why is the American West a symbol of the pioneering spirit of the United States?

Список использованных источников

www.correctenglish.ru (Дата обращения 20.02. 2018)

<https://en.wikipedia.org> (Дата обращения 26.02. 2018)

<https://kids.nationalgeographic.com> (Дата обращения 26.09. 2018)

<https://www.thoughtco.com> (Дата обращения 26.09. 2018)

<https://www.britannica.com> (Дата обращения 24.09. 2018)

САРАТОВСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ ИМЕНИ Н. Г. ЧЕРНЫШЕВСКОГО