

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РФ
КАЗАНСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ
ИНСТИТУТ УПРАВЛЕНИЯ, ЭКОНОМИКИ И ФИНАНСОВ
Кафедра иностранных языков и профессиональной коммуникации**

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**ENGLISH IN GEOGRAPHY
AND CARTOGRAPHY**

Учебное пособие

КАЗАНЬ

2021

УДК 811.111
ББК 81.2Англ
С40

*Печатается по рекомендации
Учебно-методического центра КФУ
(протокол № 5 от 29.01.2021 г.)*

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С40 English in geography and cartography: учебное пособие / З.Н. Сиразиева, Э.А. Шарифуллина. – Казань: Издательство Казанского университета, 2021. – 84 с.

Данное учебное пособие предназначено для профессионально-ориентированной подготовки по английскому языку студентов, обучающихся по направлениям 05.03.02 «География», 05.03.03 «Картография и геоинформатика», и соответствует государственному стандарту высшего профессионального образования. Учебное пособие соответствует требованиям к уровню подготовки студентов вузов по английскому языку для профессиональной и научной деятельности. Структура учебного пособия состоит из лексических упражнений, подборки текстов для аудиторной и самостоятельной работы, дополнительных заданий коммуникативной направленности, сводного словаря по всем текстам пособия, контрольных вопросов. Учебное пособие предназначено для студентов вузов, преподавателей, а также для широкого круга лиц, изучающих английский язык.

УДК 811.111
ББК 81.2Англ

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Предисловие

Данное пособие предназначено для студентов 2 курса направлений 05.03.02 «География» и 05.03.03 «Картография и геоинформатика». Оно может быть использовано слушателями факультетов довузовской подготовки, а также широким кругом лиц, изучающих английский язык.

Структура пособия:

- 20 текстов для аудиторной и самостоятельной работы студентов, в каждом из которых прорабатываются определенные лексические темы;
- лексическое приложение с развернутой системой упражнений, позволяющей поэтапно, в последовательности «от простого к сложному», ознакомиться с материалом, провести его первичное закрепление, тренировку и применение;
- дополнительные задания коммуникативной направленности для отработки навыков говорения;
- сводный словарь по всем разделам пособия;
- контрольные вопросы.

Данное пособие соответствует требованиям к уровню подготовки студентов по английскому языку для профессиональной деятельности.

Основные дидактические принципы данного пособия – систематичность и логичность изложения материала, наглядность представления лексического материала после каждого текста, доступность материала; преемственность изложения лексического материала.

Особенности данного пособия:

- все материалы текстов и упражнений четко структурированы;
- структура пособия отражает современный подход к созданию учебных материалов для изучения иностранного языка (английского) русскоязычными адресатами – имеется достаточное количество материала для отработки трудностей чтения и говорения, обширная подборка текстов и коммуникативных заданий;
- 20 текстов пособия охватывают широкий спектр профессиональных тем по направлениям 05.03.02 «География», 05.03.03 «Картография и геоин-

форматика», в то же время тексты и упражнения не перегружены профессиональной терминологией;

- пособие снабжено достаточным количеством упражнений и заданий, направленных на усвоение, закрепление и активизацию языкового материала;

- контрольные вопросы нацелены на закрепление всего пройденного лексического материала.

Text № 1

Adventure Destinations

Travel Adventure: Alaska to Argentina

Many people dream of going on a great travel adventure. Most of us keep dreaming; others make it happen. . .

Gregg Bleakney's dream was to travel the Americas from top to bottom. He got the idea after he finished a 1,600 kilometer (1,000 mile) bike ride. Gregg's friend, Brooks Allen, – was also a cyclist¹. The two friends talked and slowly **formed** a plan: they would travel from Alaska to Argentina – by bike.

To pay for the **trip**, Gregg and Brooks worked and saved their money for years. Once they were on the road, they often camped outdoors or stayed in hostels². In many places, local people opened their homes to the two friends and gave them food.

During their trip, Gregg and Brooks cycled through deserts, rainforests, and mountains. They visited modern cities and **ancient** ruins³ such as Machu Picchu in Peru. And everywhere they went they met other cyclists from all over the world.

In May 2007 – two years, twelve countries, and over 30,500 km (19,000 miles) later – Gregg **eventually** reached Ushuaia, Argentina, the southernmost city in the world. (Near Guatemala, Brooks had to return to the U.S., and Gregg continued without him.)

The trip taught both men a lot about traveling, **especially** if you travel **abroad**. What did they learn? Here is some of Gregg's **advice**:

Travel light. The less **baggage** you have, the less you'll worry about.

Be flexible. Don't plan everything. Then you'll be more **relaxed** and happy, especially if there are problems.

Be polite. As one traveler told Gregg, "Always remember that nobody wants to fight, cheat, or rob⁴ a nice guy."

¹ A cyclist is someone who rides a bicycle.

² A hostel is a cheap place to stay and sleep when traveling.

³ The ruins of something are the parts of it that remain after it has been broken.

⁴ If someone is robbed, they have money or property stolen from them.

1. Make up a dialogue using words in *italics* from the text.

2. Give definitions to the following words: abroad , advice, ancient, especially, flexible, polite, trip.

3. Find English equivalents to the following phrases in the text: продолжать мечтать, оплачивать поездку; разбить лагерь на открытом воздухе; ездить на велосипеде по пустыням, тропическим лесам и горам; самый южный город; научить обоих мужчин; особенно; беспокоиться о чем-л.; обманывать или грабить хорошего парня

4. Multiple Choice. Choose the best answer for each question.

1) Another title for this reading could be _____ .

- a. Cycling the Americas from Top to Bottom
- b. The Southernmost City in the World
- c. Things to See and Do in Alaska and Argentina
- d. Argentina: The Land of Adventure

2) Which sentence about Gregg and Brooks' trip is NOT true?

- a. To pay for the trip, they saved their money and traveled cheaply on the road.
- hi. Only Gregg made the complete trip from Alaska to Argentina.
- e. During their trip, they met people from all over the world.
- d. in Guatemala, Gregg get sick and went back to the U.S.A.

3) In the sentence (In many places, local people opened their homes to the two friends and gave them food.), *them* means _____ .

- a. the local people
- c. other cyclists
- b. Gregg and Brooks
- d. their friends

4) Which of these words or phrases is most similar in meaning to *flexible* in the sentence (**Be flexible**)?

- a. able to change easily
- b. careful
- c. well-planned
- d. difficult

- 5) Which statement would Gregg most likely agree with?
- In other countries, only stay in hotels or with people you know.
 - Plan every part of your trip so you can relax.
 - When abroad, learn how to say "thank you" in the local language.
 - Bring a lot with you on your trip so you don't have to buy anything.

5. Sequencing. Put the events below in order from 1-6. Then retell this story to a partner.

- _____ Gregg and Brooks start their trip in Prudhoe Bay, Alaska.
- _____ Gregg reaches Ushuaia, Argentina.
- _____ Gregg goes on a 1,000-mile bike ride.
- _____ Gregg and his friend Brooks talk about biking from Alaska to Argentina.
- _____ Brooks returns to the U.S.A. Gregg continues without him.
- _____ Gregg and Brooks work to save money.

Text № 2

Extreme Activities

Extreme Destination: Vanuatu

Vanuatu is an island nation in the South Pacific. It is also one of the smallest countries in the world. But for those interested in adventure and sport, there is a lot to do. Some of the best snorkeling and sea kayaking can be found here. Vanuatu's islands also offer visitors two of the most *exciting* – and dangerous – activities in the world: volcano surfing and land diving.

Volcano Surfing

On Tanna Island, Mount Yasur rises 300 meters (1,000 feet) into the sky. Yasur is an active volcano, and it erupts⁵ almost every day, sometimes several times a day. For *centuries*, both island locals and visitors have climbed this mountain to visit the top. Recently, people have also started climbing Yasur to surf the volcano.

⁵ When a volcano erupts, it throws out a lot of hot rock called "lava".

In some ways, volcano surfing is like surfing in the sea, but in other ways it's very different. A volcano surfer's *goal* is to *escape* the erupting volcano – without getting *hit* by flying rocks! It's fast, fun, and dangerous – the perfect *extreme* sport.

Land Diving

Most people are *familiar* with bungee jumping, but did you know bungee jumping started on Pentecost Island in Vanuatu and is almost fifteen centuries old? The original activity, called land diving, is part of a *religious* ceremony⁶. A man *ties* tree vines⁷ to his legs. He then jumps head first from a high tower. The goal: to touch the earth with the top of his head—without breaking the vine and hitting the ground hard. Every spring, island *natives* (men only) still perform this *amazing* test of *strength*.

1. Make up sentences using words in italics from the text.

2. Give definitions to the following words: amazing, goal, escape, exciting familiar, natives, strength.

3. Find English equivalents to the following phrases in the text: островное государство; интересоваться приключениями; подводное плавание; вулканический серфинг; земляной дайвинг (прыжки в землю; погружение в землю); побывать на вершине; спастись от извергающегося вулкана; попасть под что-л; прыжки с тарзанки; первоначальная деятельность; повредить лозу; сильно удариться о землю.

4. Multiple Choice. Choose the best answer for each question.

1) What is the purpose of this reading?

- a. to encourage people not to do dangerous sports
- b. to explain what volcano surfing and land diving are
- c. to talk about the world's best volcano surfer and land diver
- d. to compare activities in Vanuatu with sports in New Zealand

2) Which sentence about Mount Yasur is true?

- a. It is no longer active.

⁶ A ceremony is a formal event such as a wedding.

⁷ A vine is a plant that grows up or over things.

- b. It get a lot of snow.
- c. People have been climbing it for a long time.
- d. It's on Pentecost Island.

3) Land diving _____ .

- a. was first called "bungee jumping"
- b. came to Vanuatu from another country
- c. is less popular today than in the past
- d. is a traditional activity in Vanuatu

4) In the sentence (But for those interested in adventure and sport, there is a lot to do.), what does *those* refer to?

- a. people
- b. the ground
- c. activities
- d. islands

5) In the sentence (The goal: to touch the earth with the top of his head—without breaking the vine and hitting the ground hard.), what does *the earth* mean?

- a. the people
- b. the ground
- c. the tower
- d. the world

5. Classification. Match each answer (a-g) with the activity it describes.

Volcano surfing	Land diving	Both

- a. is only done by men
- b. is a new sport
- c. is dangerous because of flying rocks
- d. is a very old activity
- e. was first done on Pentecost Island
- f. is similar to a popular water sport
- g. is a very fast activity

Text № 3

Making Contact

Life Beyond Earth?

Is there intelligent life on other planets? For years, scientists said "no" or "we don't know". But today this is changing. Seth Shostak and Alexandra Barnett are astronomers. They believe intelligent life exists somewhere in the universe. They also think we will soon *contact* these beings.

Why do Shostak and Barnett think intelligent life exists on other planets? The first reason is time. Scientists believe the universe is about 12 billion years old. This is too long, say Shostak and Barnett, for only one planet in the *entire* universe to have intelligent life. The second reason is size – the universe is huge. *Tools* like the Hubble Telescope "have shown that there are at least 100 billion galaxies," says Shostak. And our galaxy, the Milky Way, has at least 100 billion stars. Some planets *circling* these stars might be similar to Earth.

Looking for Intelligent Life

Until recently, it was difficult to *search* for signs of intelligent life in the universe. But now, *powerful* telescopes *allow* scientists to *identify* smaller planets – the size of Mars or Earth – in other solar systems. These planets might have intelligent life.

Making Contact

Have beings from *space* already visited Earth? Probably not, says Shostak. Despite this, intelligent beings might eventually contact us using other methods, such as radio signals. In fact, they may be trying to *communicate* with us now, but we don't have the right tools to receive their *messages*. But this is changing, says Shostak. By 2025, we could make contact with other life forms in our universe.

1. Make up a situation using words in *italics* from the text.

2. Give definitions to the following words: communicate, entire, identify, powerful, search, space, tool.

3. Find English equivalents to the following phrases in the text: разумная жизнь; сто миллиардов галактик; вращаться вокруг звезд; другие солнечные системы; вероятно; несмотря на; общаться с нами; получать сообщения

4. Multiple Choice. Choose the best answer for each question.

1) What is the main purpose of this reading?

- a. to explain how life started on Earth
- b. to explain the beliefs of two scientists
- c. to show how telescopes work
- d. to describe what life on other planets might look like

2) What would be a good title for the second paragraph?

- a. Earth: The Only Planet with Intelligent Life
- b. The Age and Size of the Universe
- c. Our Galaxy: The Milky Way
- d. Why Intelligent Life Might Exist

3) Why was it harder to look for signs of intelligent life in in the universe in the past?

- a. Planets used to be farther apart.
- b. We did not have the right tools.
- c. We could only see smaller planets from Earth.
- d. all of the above

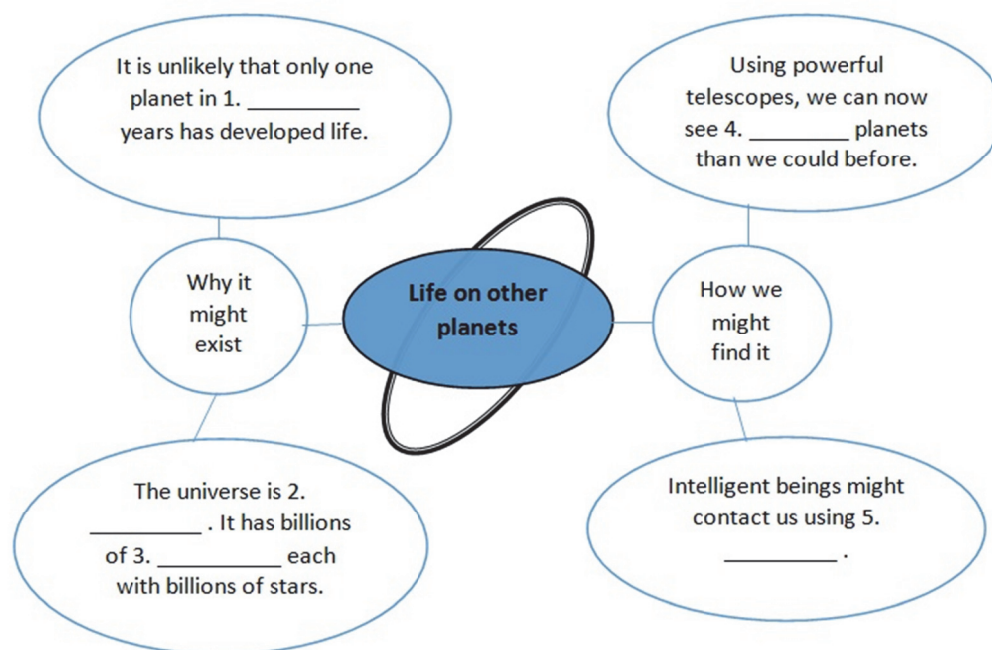
4) What kinds of planets are most likely to have intelligent life?

- a. smaller planets in our solar system
- b. smaller planets in other solar systems
- c. larger planets in our solar system
- d. larger planets in other solar systems

5) In the sentence (By 2025, we could make contact with other life forms in our universe.), what does *life forms* refer to?

- a. messages
- b. radio signals
- c. intelligent beings
- d. planets

5. Summary. Complete the diagram below with words from the reading.



Text № 4

Living on the Red Planet

Colonies in space

Stephen Hawking, one of the world's most important scientists, believes that to *survive*, humans must move into space: "Once we *spread out* into space and establish *independent* colonies, our future should be safe", he says.

Today, the USA, India, China and Japan are all planning to send astronauts back to Earth's closest *neighbour*: the moon. Each country wants to create space stations there between 2020 and 2030. These stations will prepare humans to visit and later live on Mars or other Earth-like planets.

Robert Zubrin, a rocket scientist, thinks humans should colonize space. He wants to start with Mars. Why? There are several advantages: for one, sending people to the moon and Mars will allow us to learn a lot – for example, whether living on other planets is possible. Then, we can eventually create new human societies on other planets. In addition, the *advances* we make for space travel in the field of science, technology, *medicine*, and health can also *benefit* us here on Earth.

But not everyone thinks sending humans into space is a smart idea. Many say it's too expensive to send people, even on a short *journey*. And most space trips are not short. A one-way trip to Mars, for example, would take about six months. People travelling this kind of distance face a number of health problems. Also, for many early space *settlers*, life would be extremely difficult. On the moon's *surface*, for example, the air and the sun's rays are very dangerous. People would have to stay indoors most of the time.

Despite these concerns, sending people into space seems certain. In the future, we might see lunar cities and maybe even new human cultures on other planets. First stop: the moon.

1. Make up a dialogue using words in italics from the text.

2. Give definitions to the following words: benefit, independent, journey, neighbour, settler, surface, survive.

3. Find English equivalents to the following phrases in the text: двигаться в космос; расширяться в космическое пространство; ближайший сосед; создавать космические станции; подготовить людей; колонизировать космос; область науки; проблемы со здоровьем; солнечные лучи; несмотря на эти опасения

4. Multiple Choice. Choose the best answer for each question.

1) What is the main purpose of this passage?

- a. to give reasons for and against human space travel
- b. to describe what life is like on the moon
- c. to explain the history of space travel
- d. to compare Mars and the moon

2) Between 2020 and 2030, some countries plan to send astronauts to _____ .

- a. Mars
- b. other Earth-like planets
- c. the moon
- d. another solar system

3) Why are some countries creating space stations on the moon?

- a. to learn more about human society on Earth

- b. to lower Earth's population
- c. to grow food for humans on Earth
- d. to prepare humans to live on other planets

4) Which statement would Stephen Hawking probably agree with?

- a. Being from other planets might colonize Earth.
- b. Humans should stay on Earth, not move into space.
- c. Humans should colonize other planets.
- d. Human colonies won't be safe in space.

5) In the sentence (In addition, the *advances* we make for space travel in the field of science, technology, *medicine*, and health can also *benefit* us here on Earth.), we can change In addition to _____ .

- a. So
- b. And
- c. Or
- d. However

5. For and Against. Complete the chart with information given in the reading. Which side do you agree with?

SENDING HUMANS INTO SPACE	
REASONS FOR	REASONS AGAINST
<p>We can learn if _____ on other planets is possible.</p> <p>We can create _____ on other planets.</p> <p>The things we learn about _____, _____, health and medicine can _____ humans on Earth.</p>	<p>Space travel is very _____ - it costs a lot of money.</p> <p>Long trips in space can cause many _____ in humans.</p> <p>Life on other planets would be very _____. People would have to _____ most of the time.</p>

Text № 5

Wild Weather

Tornado Chasers

In the U.S., tornadoes are *responsible* for 80 deaths and more than 1,500 injuries each year. Although they *occur* quite *frequently*, tornadoes are difficult to predict. Why? Tornadoes develop from storms, but only some storms have the *potential* to become tornadoes. Meteorologists don't know where and when a storm will touch the ground and turn into a tornado. Today, the warning time for a tornado is usually just 13 minutes.

Tim Samaras is a storm chaser. His job is to find tornadoes and follow them. When he gets close to a tornado, he puts a special tool called a *turtle probe* on the ground. This tool measures things like a twister's temperature, humidity and wind speed. With this information, Samaras can learn what causes tornadoes to develop. If meteorologists understand this, they can *warn* people about twisters sooner and save lives.

How does Samaras hunt tornadoes? It's not easy. First, he has to find one. Tornadoes are too small to see using weather satellites. So Samaras can't *rely on* these tools to find a twister. Instead he waits for tornadoes to develop. Every May and June, Samaras drives about 40,000 kilometers (25,000 miles) across an area known as Tornado Alley, looking and hoping to spot a twister.

Once Samaras sees a tornado, the chase begins. But a tornado is hard to follow. Some tornadoes change *direction* several times – for example, moving east and then west and then east again. When Samaras finally gets near a tornado, he puts the turtle probe on the ground. Being this close to a twister is *terrifying*. Debris is flying in the air. The wind is *blowing* at high speed. He must get away quickly.

The work is risky, even for a *skilled* chaser like Samaras. But danger won't stop his hunt for the perfect storm.

1. Make up a sentences using words in *italics* from the text.

2. Give definitions to the following words: blow, direction, occur, responsible, skilled, terrifying, warn.

3. Find English equivalents to the following phrases in the text: происходить довольно часто; развиваться из бурь; время предупреждения о торнадо; специальный инструмент; черепаший зонд; измерять значения; вызвать торнадо; использовать метеорологические спутники; обнаружить смерч; опытный охотник.

4. Multiple Choice. Choose the best answer for each question.

1) This reading is mainly about a man who _____.

- a. follows tornadoes to learn how they form
- b. predicts when tornadoes will occur around the world
- c. helps people who are hurt by tornadoes
- d. drive tourists around Tornado Alley

2) Which statement about tornadoes is true?

- a. Meteorologists use satellites to predict when they will occur
- b. They usually move in a straight line from place to place.
- c. Meteorologists can't predict exactly where they will form.
- d. People usually have 24 hours to prepare for them.

3) A turtle probe _____ tornadoes.

- a. can predict
- b. chases
- c. gets information from
- d. decreases the power of

4) What is paragraph 3 mainly about?

- a. how tornadoes develop
- b. how the turtle probe works
- c. how big Tornado Alley is
- d. how Samaras find a tornado

5) In the sentence (Every May and June, Samaras drives about 40,000 kilometers (25,000 miles) across an area known as Tornado Alley, looking and hoping to spot a twister.), what does the word *spot* mean?

- a. stop

- b. place
- c. see
- d. wait for

5. Sequencing. What does a storm chaser like Tim Samaras do? Put the events below in the correct order (1-7).

- _____ puts the turtle probe on the ground
- _____ shares the information with meteorologists
- _____ drives around, looking for tornadoes
- _____ gets close to a tornado
- _____ collects information from the turtle probe to learn how tornadoes form
- _____ sees a tornado and follows it
- _____ moves away quickly

Text № 6

Forests on Fire

Smokejumpers

Every year, wildfires *destroy* millions of hectares of forest land. Homes are *damaged*, and thousands of people die. Smokejumpers are helping to stop this.

What is a smokejumper?

Smokejumpers are a special type of firefighter. They jump from planes into areas that are difficult to reach by car or on foot, like the *middle* of a mountain forest. They *race* to put out fires as fast as they can.

What do smokejumpers do?

At a fire site, smokejumpers first examine the land and decide how to *fight* the fire. Their main goal is to stop a fire from spreading. Using basic *equipment* such as shovels and axes, smokejumpers clear land of burnable material like plants and other dry material. They carry water with them too, but only a limited amount.

Who can be a smokejumper?

Although the *majority* of smokejumpers are men, more women are joining. Most important are your *height* and weight. Smokejumpers *employed* in the U.S., for

example, must be 120 to 200 pounds (54 to 91 kilograms), so they don't get hurt when they land, or get blown by strong winds.

Smokejumpers must also be *capable* of surviving in the wilderness. In Russia, many smokejumpers know how to find food in the forest and even make simple furniture from trees.

The work is dangerous, and the hours are long. But for these firefighters, smokejumping isn't just an occupation. They love being able to jump out of planes, fight fires, and live in the forest. As 28-year-old Russian smokejumper Alexi Tishin says, "This is the best job for tough guys."

1. Make up a situation using words in *italics* from the text.

2. Give definitions to the following words: capable, damage, destroy, equipment, employ, fight, height.

3. Find English equivalents to the following phrases in the text: гектары лесных угодий; особый тип; добраться на машине или пешком; остановить распространение огня; лопаты и топоры; использовать базовое оборудование; горючий материал; ограниченное количество; унесет сильный ветер.

4. Multiple Choice. Choose the best answer for each question.

1) What is the reading mainly about?

- a. the life of a Russian smokejumper
- b. who smokejumpers are and what they do
- c. the difficulties of being a female smokejumper
- d. why people become smokejumpers

2) When a smokejumper gets to a fire site, what is the first thing he or she does?

- a. looks for water
- b. clears the land
- c. darts a small fire
- d. studies the land

3) If you want to be a smokejumper, you must be _____ .

- a. older than 28
- b. male

c. within a certain height range

d. able to fly a plane

4) In a *wilderness* (Smokejumpers must also be *capable* of surviving in the wilderness.), there are not many _____ .

a. people

b. fires

c. trees

d. animals

5) In Alexi Tishin's opinion, why do people become smokejumpers?

a. for the money

b. for the excitement

c. to help their country

d. to work short hours

5. Completion. Complete the job description with information from the reading.

Smokejumper for the Forest Service. Job Description:

Are you a skilled firefighter looking for a new challenge? If so, we have the job for you. As a smokejumper, you will jump into areas that are 1. _____ to reach. Your main goal will be to stop a fire from 2. _____. Both 3. _____ and _____ can join our team of smokejumper. But you must ...

weigh 4. _____ kilos

be able to 5. _____ in the wilderness independently

be ready to work 6. _____ hours

Text № 7

On Top of the World

Mystery on Everest

Were Edmund Hillary and Tenzing Norgay really the first people to reach the top of Mount Everest? Some believe British climbers George Mallory and Andrew

Irvine reached the summit previously – in June 1924. Unfortunately, this is hard to prove because both men vanished on the mountain.

Recently a team of climbers visited Everest, hoping to solve this mystery. Near Everest's First Step, on the way to the summit, the team found Mallory's *oxygen* tank – evidence that he and Irvine were near the top. Close by, a member of the team, Conrad Anker, discovered Mallory's body.

When the team examined Mallory's body, they found items like a knife and matches, but no photos. Why is this *significant*? Mallory carried a photo of his wife with him. He planned to leave it at the top of Everest, if he reached the *summit*.

Did Mallory and Irvine *achieve* their goal and reach the top?

Probably not, says Anker. Here's why:

Difficult path/Poor equipment: Mallory and Irvine were last seen near Everest's Second Step. This is a 27-meter (90-foot) wall of rock. Climbing this *section* of Everest is extremely difficult, even with modern climbing equipment. Without the right tools, it is *doubtful* Mallory and Irvine were able to *proceed* to the top.

No frostbite: Mallory and Irvine were near the summit late in the day. Climbers who reach the summit at this time need to camp at the top. If you do this, it is common to *suffer* from frostbite. But Mallory's body had no sign of frostbite.

So what happened to Mallory and Irvine? Anker thinks they probably turned back just after the First Step. When Mallory was going down, perhaps he accidentally fell. Irvine's body has never been found. *Whatever* happened, they will always be remembered as early Everest heroes.

1. Make up a dialogue using words in italics from the text.

2. Give definitions to the following words: achieve, doubtful, oxygen, significant, suffer, summit, whatever.

3. Find English equivalents to the following phrases in the text: достичь вершины; к сожалению; разгадывать тайну; исчезнуть в горах; кислородный баллон; найти предметы; страдать от обморожения; современное альпинистское снаряжение; достичь своей цели; вблизи вершины; никаких признаков обморожения.

4. Multiple Choice. Choose the best answer for each question.

1) The reading is mainly about two climbers who _____ .

- a. solved a mystery about Everest
- b. vanished on Everest
- c. recreated Hillary and Norgay's climb
- d. invented new climbing tools

2) Which statement is true?

- a. Mallory and Irvine were last seen near Everest's First Step.
- b. Conrad Anker's team found two bodies on Everest.
- c. Mallory and Irvine were near the top of Everest in the morning.
- d. Anker's team found some of Mallory's things on the mountain.

3) In the sentence (He planned to leave it at the top of Everest, if he reached the summit.), what does *it* refer to?

- a. the body
- b. the oxygen tank
- c. the summit
- d. the picture

4) If Mallory and Irvine *turned back* (Anker thinks they probably turned back just after the First Step.), they _____ the mountain.

- a. stopped and went down
- b. went around
- c. tried to walk up
- d. stayed in one place on

5) Which statement would Conrad Anker probably agree with?

- a. Mallory and Irvine definitely reached the top of Everest.
- b. Mallory and Irvine never got close to the summit.
- c. Mallory and Irvine got close, but didn't reach the top.
- d. Andrew Irvine probably reached the top, but not Mallory.

5. For and Against. Complete the chart with information given in the reading. Which side do you agree with?

Did Mallory and Irvine reach the top of Mount Everest?	
Reasons for	Reasons against
Conrad Anker's team discovered Mallory's 1. _____ tank and 2. _____ near the First Step.	Climbing Everest's Second Step is very 5. _____, and Mallory and Irvine didn't have modern 6. _____.
The team didn't find a(n) 3. _____ of Mallory's wife's. He planned to 4. _____ it at the summit.	Mallory's body had no 7. _____. This is common for people who 8. _____ near the summit for the night.

Text № 8

When Disaster Strikes

The Flooding of New Orleans

Hurricane Katrina, which struck the U.S. Gulf Coast in August 2005, was one of the costliest natural disasters in U.S. history — both economically and in terms of lives lost. Damage to the city of New Orleans was estimated at more than 22 billion dollars. Over one million people were forced out of the city, and nearly 1,500 people lost their lives.

The Storm Arrives

A day before Hurricane Katrina passed close to New Orleans, *residents* were ordered to leave the city. Unfortunately, tens of thousands of people *ignored* the order or were unable to leave. When Hurricane Katrina hit, water broke through the system of levees and *flood* walls constructed by government *engineers*. Many people in low-lying *sectors* of the city were forced up onto their roofs by the flood water and waited for help to come by boat or helicopter.

Chaos in the City

Circumstances soon grew worse. There were not enough police left in the city, so people were not only *exposed* to dangerous floodwaters but also to *widespread* crime. "Most of our people were focused on getting people off roofs and out of the

water,” said one police officer. “There were not enough people in the city to rescue and *distribute* food and water to those who needed help.”

Lootings of stores was common. “I’ve looted,” said Matthew, 35. “But only to keep my family and myself alive. They left us here for days without any food or water, like we were just supposed to die. So we had to loot or die.”

Waiting for Help

A borrowed hotel curtain hung over street signs provided shelter for one large extended family. “I was starting to think it was going to be our home forever”, Kenneth, 47, said. “They told us every day that buses were going to take us to shelters. It was just lies and more lies.”

People lived without running water or toilets as they waited for help. Dead bodies were left on streets. It was days before the government gained control of the city and remaining people were taken to safety.

Should New Orleans Be Rebuilt?

Some experts believe that rebuilding New Orleans isn’t a good idea. *Currently*, even a *hurricane* of average strength could cause flooding in the city again. Global warming is raising sea levels each year, and to make things worse, the land beneath New Orleans is *sinking* at a rate of up to 2,5 centimeters a year. However, despite the risk, two-thirds of the people who left have returned to help rebuild the city they love.

1. Make up sentences using words in *italics* from the text.

2. Give definitions to the following words: currently, distribute, expose, flood, hurricane, sink, widespread.

3. Find English equivalents to the following phrases in the text: самые дорогостоящие стихийные бедствия; ущерб городу; вытеснить из города; система дамб и паводковых стен; приехать на лодке или вертолете; опасные паводки; разграбление магазинов; отвозить кого-либо в приюты; проточная вода; получить контроль над городом; ураган средней силы; несмотря на риск.

4. Multiple Choice. Choose the best answer for each question.

1) What is this passage mainly about?

a. how Katrina formed

- b. why New Orleans should be rebuilt
- c. how people in New Orleans died in Katrina
- d. the impact of Katrina on New Orleans

2) How many people lost their lives in the flooding of New Orleans?

- a. 22
- b. 300
- c. 1,500
- d. 2005

3) Which of the following is NOT a factor that made the disaster worse?

- a. water breaking through the levees
- b. looting and other crime
- c. slow distribution of food and water
- d. people returning to the city

4) In the sentence (Global warming is raising sea levels each year, and to make things worse, the land beneath New Orleans is sinking at a rate of up to 2,5 centimeters a year.), the phrase *up to* is closest in meaning to _____ .

- a. more than
- b. as high as
- c. from
- d. approximately

5) What is the main idea of the last paragraph'?

- a. Many people cannot understand why rebuilding New Orleans is a good idea.
- b. Many people think that global warming isn't actually happening.
- c. Many people don't believe what experts say about rebuilding New Orleans
- d. Many people love their city so much they will risk more flooding.

5. Sequencing. In what order did the following events occur? Number them from 1 to 5.

_____ People were forced up to their roots.

_____ A number of stores were looted.

_____ Water broke through the system oi levees and flood walls.

_____ The government gained control of the city and took people to safety.

_____ Everyone was ordered to leave the city

Text № 9

Superstorm

Tropical Cyclones

We call them by *sweet-sounding* names like Firinga or Katrina, but they are huge rotating storms 200 to 2,000 kilometers wide with winds that blow at speeds of more than 100 kilometers per hour. Weather professionals, or meteorologists, know them as tropical cyclones, but they are called hurricanes in the Caribbean Sea, typhoons in the Pacific Ocean, and *cyclones* in the Indian Ocean. They occur in both the northern and southern hemispheres. Large ones have destroyed cities and killed hundreds of thousands of people.

Birth of a Giant

We know that tropical cyclones begin over water that is warmer than 27 degrees Celsius (80 degrees Fahrenheit) *slightly* north or south of the earth's equator. Warm, *humid* air full of water *vapor* moves upward. The earth's rotation causes the growing storm to start to rotate around its center (called the eye). At a certain height, the water vapor condenses, changing to liquid and releasing *heat*. The heat draws more air and water vapor upward, creating a cycle as air and water vapor rise and *liquid* water falls. If the cycle speeds up until winds reach 118 kilometers per hour, the storm qualifies as a tropical cyclone.

Storm Surge

Most deaths in tropical cyclones are caused by storm surge. This is a rise in sea level, sometimes seven meters or more, caused by the storm pushing against the ocean's surface. Storm surge was to *blame for* the flooding of New Orleans in 2005. The storm *surge* of Cyclone Nargis in 2008 in Myanmar pushed seawater nearly four meters deep some 40 kilometers inland, resulting in many deaths.

Difficult to Predict

The goal is to know when and where the next tropical cyclone will form. "And we can't really do that yet," says David Nolan, a weather researcher from the University of Miami. The direction and strength of tropical cyclones are also difficult to *predict*, even with computer assistance. Three-day *forecasts* are still off by an average of 280 kilometers. Forecasters do know that storms are often energized where ocean water is deep and warm, that high *waves* tend to reduce their force, and that when tropical cyclones move over land, they begin to die.

Long-term forecasts are poor; small differences in the combination of weather factors lead to very different storms. More *accurate* forecasting could help people decide to *evacuate* when a storm is on the way. "People often return after an evacuation to find nothing really happened," says storm researcher Sharan Majumdar. "The *solution* is to improve forecasting through better *science*. That's the only way to get people to trust the *warnings*."

1. Make up a situation using words in *italics* from the text.

2. Give definitions to the following words: accurate, blame (for), forecast, science, solution, surge, warning.

3. Find English equivalents to the following phrases in the text: сладко звучащие имена; огромные вращающиеся штормы; дуть со скоростью; начинать над водой; влажный воздух полный водяного пара; на определенной высоте; подъем водяного пара; приводить к множеству смертей; уменьшить силу; исследователь штормов.

4. Multiple Choice. Choose the best answer for each question.

1) Firinga is _____ .

- a. an ocean
- b. a large city
- c. a storm
- d. a famous meteorologist

2) In the sentence (At a certain height, the water vapor condenses, changing to liquid and releasing heat.), the word *condenses* is closest in meaning to _____ .

- a. heats up
- b. moves higher
- c. starts rotating
- d. becomes liquid

3) Which step comes first in the process of storm formation?

- a. Winds reach 118 kilometers per hour.
- b. Warm, humid air moves upward.
- c. Liquid water falls.
- d. Water vapor condenses.

4) Which of the following is closest in meaning to "the direction and strength of tropical storms are difficult to predict, even with computer assistance"?

- a. Despite using computers, it is difficult to know where tropical cyclones will strike next.
- b. Without computers, predicting tropical cyclones is impossible.
- c. Computer assistance removes the difficulty of predicting tropical cyclones.
- d. Using computers to predict tropical storms is difficult.

5) What is the main idea of the third paragraph?

- a. Rising sea levels are causing increasing storm damage.
- b. In a storm, most people are killed by high sea levels.
- c. People have tried to connect storm deaths to rising sea levels.
- d. Dangerous storm surges happen mostly in Bangladesh.

B. Matching. Match the causes on the left with their effects on the right.

Causes	Effects
1. condensing water vapor releases	a. a storm as e tropical cyclone
2. winds of 118 kilometers per hour duality	b. a storm surge
3. deep, warm ocean water energizes	c. a storm's force
4. high waves reduce	d. heat
5. storms pashing against ocean surface create	e. a storm

Text № 10

Marco Polo in China

The Polos – Marco, his father Niccolò, and his uncle Maffeo – had been traveling for three and a half years when they finally achieved their *objective* – a long-awaited meeting with the powerful Mongol leader, Kublai Khan. The historic event took place in 1275 at the Khan’s luxurious summer capital in Shengdu, in what is now northern China. As he greeted his tired guests, Kublai Khan was surprisingly informal: “Welcome, gentlemen! Please stand up. How’ve you been? How was the trip?”

Marco Polo’s trip had, in fact, started more than 9,000 kilometers (5,600 miles) away in Venice when he was just a teenager. His father and uncle already knew Kublai Khan from a previous visit five years earlier, when they had spent a short time in Shengdu. On this second trip, the Polos stayed for 17 years, making themselves useful to the Khan and *undertaking* various missions and tasks for him. It is likely that the Khan considered it an honor that these Europeans—who were rare in China—had made this extremely difficult journey, and he made good use of their skills and knowledge.

In the service of Kublai Khan, “the most powerful man in people and in lands and in treasure that ever was in the world,” Marco Polo was able to learn and experience many things that were new to Europeans. In his travel *journal*, he described Kublai Khan’s *palace* as the greatest he had ever seen. He *admired* the Khan’s recently completed new capital, Daidu, whose streets were “so straight and so broad.” The city was located in what is now the center of Beijing, and Kublai Khan’s city planning can still be *perceived* in the straight, broad streets of China’s modern capital.

We learn from Marco Polo that, in the *administration* of his empire, Kublai Khan made use of a fast and simple message system. Horse riders spaced every 40 kilometers allowed messages to cover 500 kilometers a day. Marco also learned the secret of asbestos cloth, which is made from a *mineral* and doesn’t catch fire. Paper money also took him by surprise, as it was not yet in use in the West at that time. Homes were heated with “black stones ... which burn like logs.” Those stones were

coal – unknown in most of Europe – and they were so plentiful that many people had a hot bath three times a week.

Although the Khan did not want his visitors to leave, the Polos finally received permission to return home in 1292. Marco continued his observations on the ocean *voyage* by way of Sumatra and India. Upon his return, he completed a book about his trip, full of details about his amazing cultural experiences. It was probably the greatest *contribution* of geographic information ever made to the West about the East.

1. Make up a dialogue using words in *italics* from the text.

2. Give definitions to the following words: admire, contribution, mineral, objective, palace, perceive, voyage.

3. Find English equivalents to the following phrases in the text: достичь своей цели; предыдущий визит; использование своих навыков и знаний; испытать много вещей; узнал секрет асбестовой ткани; получить разрешение на что-л.; наблюдения за океаном; завершить книгу о чем-л.; застать кого-л. врасплох.

4. Multiple Choice. Choose the best answer for each question.

1) Who was Marco Polo?

- a. a young man from Venice
- b. a person who worked for Kublai Khan
- c. a writer of a book about his travels
- d. all of the above

2) Where is Kublai Khan's influence still felt in Beijing today?

- a. in the food
- b. in the streets
- c. in the universities
- d. in the buildings

3) What allowed a message to cover 500 kilometers a day?

- a. runners
- b. horse riders
- c. ships
- d. asbestos

4) What does the use of asbestos cloth, paper money, and coal seem to tell us about the East and the West?

- a. The West had already improved on these areas of technology.
- b. The East had learned various technologies from the West.
- c. We West had forgotten these technologies still used in the East.
- d. The East was ahead of the West in some areas of technology.

5) In the sentence (It was probably the greatest *contribution* of geographic information ever made to the West about the East.), the word *it* refers to which noun'?

- a. culture
- b. completion
- c. book
- d. contribution

5. Sequencing. Write the number of each event on the correct place on the timeline.

- 1.Marco begins working for Kublai Khan and traveling around China.
- 2.Niccolo and Maffeo depart to visit the Khan with Marco.
- 3.Niccolo and Maffeo visit the Khan without Marco.
- 4.Marco completes his book.
- 5. The three Poles leave China by ship.

1266
1271
1275
1292
1299

Text № 11

Global Warming

A Warming World

The Big Thaw

The Chacaltaya ski area in Bolivia used to be the highest in the world. Although it was less than a kilometer long, it hosted international ski competitions. Today the snow has almost gone, and so have Chacaltaya's days as a popular ski *resort*.

The ski area sits upon a small mountain glacier, which was already getting smaller when the ski area opened in 1939. In the past ten years, however, the glacier has been melting at an increased rate. As the glacier melts, dark rocks beneath it is *uncovered*. The sun then heats the rocks, causing faster melting. Despite attempts to make snow with snow machines, this cycle seems *unstoppable* in the long run.

As experts debate how to *solve* the global warming problem, ice in mountains such as Chacaltaya and near the North and South Poles is *melting* faster than even the most pessimistic *environmentalists* may have once feared. Rising air and sea temperatures are two well-known causes, but researchers have recently discovered other *unexpected* processes that take place as glaciers melt. The effects are having an impact on humans even now, and they could change the face of the world in the future.

Serious Consequences

The glaciers of the Himalayas and the Andes could disappear in this century. As a result, the millions of people in India, Bolivia, and Peru who now depend on melting water from mountain glaciers could find themselves in a critical situation. The ice sheet of Greenland is also melting more quickly than scientists predicted. Greenland's largest outlet glacier, the Jakobshavn Isbrae glacier, is moving toward the sea twice as fast as it was in 1995. One cause could be meltwater that runs down to the bottom of the glacier and gets between the ice and the rock below. This water makes it easier for the *glacier* to *slide* along to the ocean.

Many ice researchers believe that Greenland's melting, if it continues, will add at least three feet to global sea levels by the year 2100. If the ice sheet of Antarctica,

now largely unaffected, begins to melt, the next few centuries could see a six-foot rise in sea levels, forcing tens of millions of people out of their homes.

How can we avoid these dire consequences of global warming? “We have to have a serious and *immediate* shift in attitude,” says Laurie David, producer of the prize-winning movie *An Inconvenient Truth*, which helped to raise awareness of the problem. Many believe that an attitude of hope and a desire to stay informed make a good beginning. An informed public is in a better position to help address this critical issue.

1. Make up sentences using words in *italics* from the text.

2. Give definitions to the following words: environmentalist, glacier, immediate, resort, slide, solve, unexpected.

3. Find English equivalents to the following phrases in the text: проводить международные лыжные соревнования; популярный горнолыжный курорт; находится на небольшом горном леднике; тем не менее; таять с повышенной скоростью; решить проблему глобального потепления; неожиданные процессы; оказывать влияние на людей; спуститься на дно ледника; повышение уровня моря; повысить осведомленность о проблеме; ледяной покров Антарктики

4. Multiple Choice. Choose the best answer for each question.

1) What was the author's purpose in writing this passage?

- a. to explain the problem of melting glaciers
- b. to suggest how to slow the melting of glaciers
- c. to illustrate how glaciers are formed and disappear
- d. to explain the causes of global warming

2) In the sentence (Despite attempts to make snow with snow machines, this cycle seems *unstoppable* in the long run.), the phrase *in the long run* is closest in meaning to _____.

- a. in the near future
- b. over a long period of time.
- c. depending on the length of time.
- d. for a long time without stopping.

3) What do many researchers believe will happen by the year 2100?

- a. The ice sheet of Antarctica will begin to melt.
- b. Tens of millions of people will be forced out of their homes.
- c. The melting of Antarctic ice will add 20 feet to sea levels.
- d. Global sea levels will rise at least three feet.

4) What is happening to the ice sheet at Antarctica?

- a. It is melting dangerously quickly.
- b. Its outlet glaciers are all speeding up.
- c. Its condition isn't changing very much.
- d. It is causing a rise in global sea levels.

5) Which of the following statements would Laurie David most likely agree with?

- a. Global warming is a problem that will probably fix itself over time.
- b. There is nothing the average person can do to affect global warming.
- c. Global warming is a problem, but not a very serious one.
- d. To prevent global warming, people need to change the way they think.

5. Matching. Match three of the processes with each glacier. Put them in the correct order.

Glacier	Processes
Chacaltaya 1. ___ 2. ___ 3. ___	a. Water gets between the glacier and the rock below. b. The glacier melts more quickly.
Jacobshavn Isbrae 4. ___ 5. ___ 6. ___	c. The rocks absorb heat from the sun. d. Meltwater runs down to the bottom of the glacier. e. Dark rocks beneath the glacier are uncovered. f. The glacier slides more quickly.

Text № 12

Violent Earth

Sacred Mountains

Volcanoes are both creators and destroyers. They can shape lands and cultures, but can also cause destruction and loss of life. Two of the best-known examples are found at opposite ends of the world, separated by the Pacific Ring of Fire.

Japan's Sacred Summit

It's almost sunrise near the summit of Japan's Mount Fuji. Exhausted climbers, many of whom have hiked the 3,776 meters through the night to reach this point stop to watch as the sun begins its ascent, spreading its golden rays across the mountain. For everyone, this is an important moment: they have *witnessed* the *dawn* on Mount Fuji – the highest point in the Land of the Rising Sun.

Located in the center of Japan, Mount Fuji, whose name means “without equal” is a sacred site. Japan's native religion, Shintoism, considers Fuji a *holy* place. Other people believe the mountain and its waters have the power to make a sick person well. For many, climbing Fuji is also a rite of passage. Some do it as a part of a religious journey; for others, it is a test of strength. Whatever their reason, reaching the top in order to stand on Fuji's summit at sunrise is a must for many Japanese – and every July and August, almost 400 000 people attempt to do so.

Fuji is more than a sacred site and tourist destination, however. It is also an active volcano around which four million people have settled, and sits just 112 kilometers from the crowded streets of Tokyo. The last time Fuji exploded, in 1707, it sent out a cloud of ash that covered the capital city and darkened the skies for weeks.

Today, new data have some volcanologists concerned that Fuji may soon erupt again. According to Motoo Ukawa and his associates at the National Research Institute for Earth and Science and *Disaster* Prevention, there has been an increase in activity under Fuji recently, which may be caused by low-frequency earthquakes. Understanding what causes these quakes may help scientists predict when Fuji, the biggest of Japan's 86 active volcanoes, will come back to life. In the meantime, locals living near Fuji hold special festivals each year to offer gifts to the goddess of the

volcano – as they have for generations – so that she will not erupt and destroy the land and its people below.

Mexico's Smoking Mountain

Halfway across the globe from Fuji, Popocatepetl — one of the world's tallest and most dangerous active volcanoes — stands just 60 kilometers (37 miles) southeast of Mexico City. Although the volcano (whose name means, “smoking mountain”) has erupted many times over the centuries, scientists believe its last great eruption occurred around 820 A. D. In recent years, however, El Popo, as Mexicans call the mountain, has been threatening to explode once more; in December 2000, almost 26,000 people were evacuated when El Popo started to send out ash and smoke. As with all active volcanoes, the question is not *if* it will erupt again (an eruption is *inevitable*); the question is *when* it will happen.

"Every volcano works in a different way," explains Carlos Valdes Gonzalez, a scientist who *monitors* El Popo. "What we're trying to learn here are the symptoms signaling that El Pope will erupt." These include earthquakes, or any sign that the mountain's surface is changing or *expanding*. The hope is that scientists will be able to warn people in the surrounding areas so they have enough time to escape. A powerful eruption could *displace* over 20 million people—people whose lives can be saved if the warning is delivered early enough.

For many people living near El Popo – especially the farmers-*abandoning* their land is unthinkable. As anyone who farms near a volcano knows, the world's richest soils are volcanic. They produce bananas and coffee in Central America, fine wines in California, and enormous amounts of rice in Indonesia.

Today, many people who live near El Popo continue to see the mountain as their *ancestors* did. According to ancient beliefs, a volcano can be a god, a mountain, and a human all at the same time. To appease El Popo and to ensure rain and a good harvest, locals begin a cycle of ceremonies that starts in March and ends in August. Carrying food and gifts for the volcano, they hike up the mountain. Near the summit, they present their offerings, asking the volcano to protect and provide for one more season.

1. Make up a situation using words in *italics* from the text.

2. Give definitions to the following words: ancestor, disaster, displace, expand, inevitable, monitor, witness.

3. Find English equivalents to the following phrases in the text: вызвать разрушение; измученные альпинисты; новые данные; помогает ученым предсказать; предупредить людей, расположенный в центре; самый опасный действующий вулкан; священное место; согласно древним поверьям; хорошо известные примеры.

4. Multiple Choice. Choose the best answer for each question.

1) What is the third paragraph [starting line (Located in the center of Japan, Mount Fuji, whose name means “without equal” is a sacred site.)] mainly about?

- a. how Mount Fuji became an important religious site
- b. the healing properties of Mount Fuji
- c. reasons people climb Mount Fuji
- d. the visitors to Mount Fuji

2) Which of these statements about Mount Fuji is not true?

- a. It is the largest volcano in Japan.
- b. Scientists believe it may erupt soon.
- c. It has erupted recently.
- d. Locals have traditions concerning the mountain.

3) In the sentence "What we're trying to learn here are the symptoms signaling that El Pope will erupt."), the word *symptoms* could be replaced with _____ .

- a. earthquakes
- b. signs
- c. sounds
- d. lessons

4) Scientists can date the last great eruption of El Pope _____ .

- a. by talking to people who experienced the event
- b. from videos of the eruption
- c. from investigating geological evidence
- d. from descriptions in religious books

5) What was the reason for the evacuation from El Popo in 2000?

- a. Ash and smoke were seen coming from the mountain.
- b. A large earthquake was felt.
- c. A change in the mountain's surface was noticed.
- d. A powerful eruption took place.

6) Which statement is true about both Mount Fuji and El Popo?

- a. They have both erupted recently.
- b. They are both less than 100 kilometers from a very large city.
- c. Locals present gifts to both volcanoes for protection.
- d. They both provide rich soil used for producing coffee.

5. Write an essay "My exciting adventure in the mountains" (150-200 words).

Text № 13

Earthquake zones

Is Prediction Possible?

Never before have so many people packed into cities—places such as Los Angeles, Istanbul, Tokyo, and Lima—that are regularly affected by earthquakes. Located near the edge of Earth's huge, shifting plates, these cities face the risk of death and economic disaster from large quakes—and from the tsunamis, fires, and other **destruction** they often cause.

We understand earthquakes better than we did a century ago. Now, scientists would like to predict them, but is this possible? Today, some of the simplest questions about earthquakes are still difficult to answer: Why do they start? What makes them stop? Perhaps the most important question scientists need to answer is this: Are there clear patterns in *earthquakes*, or are they basically *random* and impossible to predict?

In Japan, government scientists say they have an answer to the question. "We believe that earthquake prediction is possible," says Koshun Yamaoka, a scientist at the Earthquake Research Institute at the University of Tokyo. Earthquakes follow a pattern; they have observable signs, Yamaoka believes. In fact, Japan has already predicted where its next great earthquake will be: Tokai, a region along the Pacific

coast about 160 kilometers (100 miles) southwest of Tokyo. Here, two plate boundaries have generated huge earthquakes every 100 to 150 years. And it could be a **massive** quake. The section along Tokai hasn't had a major quake since 1854. The theory is that strain is building up in this region, and that it's time for this **zone** to reduce its stress. Unfortunately, this is more a forecast than a prediction. It's one thing to say that an earthquake is likely to happen in a high-risk area. It's another to predict exactly where and when the quake will occur.

The desire for a **precise** prediction of time and place has led to another theory: the idea of "preslip." Naoyuki Kato, a scientist at the Earthquake Research Institute, says his **laboratory** experiments shew that before a fault in the Earth's crust finally breaks and causes an earthquake, it slips just a little. If we can **detect** these early slips taking place deep in the Earth's crust, we may be able to predict the next big quake.

Clues in the Desert

Scientists working in Parkfield, California, in the U.S. are also trying to see if predicting earthquakes are possible. They've chosen the town of Parkfield not only because the San Andreas Fault runs through it, but because it's known for having earthquakes quite regularly—approximately every 22 years. In the late 1980s, scientists in Parkfield decided to study the fault to see if there were any warning signs prior to a quake. To do this, they **drilled** deep into the fault and set up equipment to register activity. Then they waited for the quake.

Year after year, nothing happened. When a quake did finally hit on September 28, 2004, it was years off schedule, but most disappointing was the lack of warning signs. Scientists reviewed the data but could find no evidence of anything unusual preceding the September 28th quake. It led many to believe that perhaps earthquakes really are random events. Instead of giving up, though, scientists in Parkfield dug deeper into the ground. By late summer 2005, they had reached the fault's final depth of three kilometers (two miles), where they continued collecting **data**, hoping to find a clue.

And then they found something. In an article published in the July 2008 journal *Nature*, the researchers in Parkfield claimed to have detected small changes in the fault shortly before an earthquake hit. What had they noticed? Just before a quake, the cracks in the fault had widened slightly. Scientists registered the first changes ten

hours before an earthquake of 3.0 on the Richter scale hit; they identified identical signs two hours before a 1.0 quake—demonstrating that perhaps the "pre-slip" theory is correct. In other words, it may in fact be possible to predict an earthquake.

Although there is still a long way to go, it appears from the research being done all over the world that earthquakes are not entirely random. If this is so, in the future we may be able to *track* the Earth's movements and design early-warning systems that allow us to predict when a quake will happen and, in doing so, prevent the loss of life.

1. Make up a dialogue using words in *italics* from the text.

2. Give definitions to the following words: data, destruction, detect, drill, earthquake, precise, track.

3. Find English equivalents to the following phrases in the text: делать обзор данных; исследование землетрясений; малые изменения; невозможно предсказать; по всему миру; следовать структуре; точное предсказание; уменьшить стресс; устанавливать оборудование; ученые заявили.

4. Multiple Choice. Choose the best answer for each question.

1) What is the reading mainly about?

- a. earthquake prediction failures
- b. the Japanese government's work on earthquakes
- c. efforts to predict when an earthquake will happen
- d. the Parkfield investigations

2) Which of the following is closest in meaning to the reading's first sentence, beginning *Never before have...* ?

- a. Many people who live in big cities have experienced earthquakes.
- b. Cities crowded with people are more likely to have serious earthquakes.
- c. Some of the biggest cities in the world suffer damage from earthquakes.
- d. More people than ever live in cities that are affected by earthquakes.

3) In the sentence (To do this, they *drilled* deep into the fault and set up equipment to register activity.), what does *do this* refer to?

- a. wait for an earthquake
- b. study the fault

- c. predict an earthquake
- d. set up equipment

4) In the sentence (Scientists reviewed the data but could find no evidence of anything unusual preceding the September 28th quake.), the word *reviewed* could be replaced with _____ .

- a. recorded
- b. deleted
- c. saw
- d. studied

5) Which of the following statements is NOT true?

- a. A major earthquake occurs in Tokai every 100-150 years.
- b. Scientists believe that the "pre-slip" theory could help predict earthquakes.
- c. Data supporting the "ere-slip" theory was found in Parkfield.
- d. There was a major earthquake in Parkfield, in late summer 2005.

6) According to Parkfield scientists, how did cracks in the fault change before an earthquake hit?

- a. They became much wider.
- b. They became slightly narrower.
- c. They became slightly wider.
- d. They became much narrower.

7) What is the main idea of the last paragraph (starting line (Although there is still a long way to go, it appears from the research being done all over the world that earthquakes are not entirely random))?

- a. Further research will help us avoid loss of life in the future.
- b. Earthquake research has had a long and successful history.
- c. Early-warning systems are being designed to predict earthquakes.
- d. It is unlikely we will ever be able to predict the Earth's movement accurately.

5. Make a summary of the text.

Text № 14

The perfect beach

In *pursuit* of the perfect beach, travel writer Stanley Stewart heads to Brazil, where he discovers some of the world's most beautiful sandy escapes.

I'm standing on Rio de Janeiro's Copacabana beach, one of Brazil's – and the world's – most famous stretches of sand. As I watch life go by here in all its varied forms, I've come to realize that any understanding of Brazil really begins on its beaches. In this vibrant, multicultural country, the beach is not just a place; it's a state of mind – a way of thinking and living.

Rio alone, I'm told, has over 70 beaches, each with its own community: some are for bodybuilders, others are for senior citizens, still others are popular with parents and children. But Rio's beaches are just the starting point for my exploration of Brazil's Atlantic coastline, which at more than 8,000 kilometers (5,000 miles), and with more than 2,000 beaches, is the longest in the world. Every Brazilian has his or her own ideas of the perfect beach and is *eager* to tell you where to find it. I'm happy to take people's advice, but my *ultimate* goal is to find my own dream beach.

I head to a place said to have some of Brazil's best coastline: the state of Bahia in the northeast. Portuguese settlers established themselves at Bahia's present-day capital, Salvador da Bahia, in 1549. Over the centuries, people of many races have arrived and intermarried here, creating a distinctive cultural mix, which influences Bahia's language, religion, cuisine, music, and dance.

I'd been told that one of Bahia's best beaches— Prainha – lies just south of Salvador, near the town of Itacare. On arriving at Prainha's beach, I discover its golden sand lined by a row of perfect palm trees, moving softly in the ocean breeze. Under the moon, silver waves roll onto the sand. As I enter the water, I have the feeling of swimming through moonlight. Prainha's beauty is *magnificent* – its perfect curves and graceful lines are like something you might see in a postcard. But for me, it's a little too perfect. The beach I'm searching for needs to be a little wilder...

I continue my search, heading north to one of Brazil's legendary beaches: Jericoacoara. Twenty years ago, only a handful of people were living in Jeri. Today it's an international *destination*, considered one of the best beach hangouts in the world (especially if you like windsurfing). It attracts visitors from Tokyo to Toronto and has grown from a small village into a lively little town. Despite the charges, Jeri hasn't been *spoiled* by tourists, mostly because of its *isolated* location--it's at least five hours from any airport.

Everyone in Jeri rents a beach buggy, which comes with a driver. I tell my driver to take me as far along the coast as he can. We drive for three hours, finally arriving at Maceio, a fisherman's beach. Boats lie on their sides while nets hang out to dry on lines between fishermen's houses. We eat on the beach and later rest in hammocks near the table. It's a great day on an amazing beach. *How can it possibly get any better?* I wonder. But I have one final place to visit.

Of the many beach destinations in this country, there is one that all Brazilians hold in high regard—the islands of Fernando de Noronha. More than a dozen beautiful beaches ring the island of Fernando alone, three of which *rank* among the top ten in Brazil. The islands of Fernando de Noronha lie a few hundred kilometers out in the Atlantic. For years, people were *prohibited* from visiting these islands because they were used as a prison and later by the army. Today the islands are a national park and UNESCO World Heritage Site, rich with *diverse* bird and sea life.

I visit a number of beaches on Fernando, but I leave the best one for last. The beach at Praia do Leão is the perfect balance of sand, sea, and sky. The water is pale blue and warm, alive with colorful fish, turtles, and other marine life; the sand is the color of honey. And in the rock formations and strong winds that occasionally come in from the Atlantic, there is that hint of wildness I was seeking. Finally, I've found the beach of my dreams. I dig my toes in the sand deeply and imagine I can hold on to this place forever.

1. Make up sentences using words in *italics* from the text.

2. Give definitions to the following words: destination, diverse, eager, magnificent, pursuit, rank, ultimate.

3. Find English equivalents to the following phrases in the text: десятки красивых пляжей, золотой песок, лучшая береговая линия, найти пляж моей мечты, океанский бриз, отличный пляж, рыбацкие дома, сильные ветра, увидеть на открытках, цвет мёда.

4. Multiple Choice. Choose the best answer for each question.

1) What is the reading mainly about?

- a. Brazilian beach tourism
- b. an educational tour of South America's beaches
- c. the author's search for the dream beach
- d. little-known beaches of South America

2) What is the purpose of paragraph 4 (I head to a place said to have some of Brazil's best coastline: the state of Bahia in the northeast.)?

- a. to describe Bahia's many beaches
- b. to explain why Bahia has the perfect beach
- c. to describe Bahia's music and dance scene
- d. to give information on Bahia's cultural background

3) In the sentence (I continue my search, heading north to one of Brazil's legendary beaches: Jericoacoara.), the word *legendary* could be replaced with _____ .

- a. oldest
- b. isolated
- c. picturesque
- d. famous

4) Which of these beaches is the most isolated?

- a. Copacabana
- b. Prainha
- c. Jericoacoara
- d. Maceio

5) The islands of Fernando de Noronha now _____ .

- a. contain a prison

- b. are a national park
- c. are used by the army
- d. have many beach buggies

6) In the sentence (I visit a number of beaches on Fernando, but I leave the best one for last.), the best one refers to _____ .

- a. the collection of Fernando beaches
- b. Praia do Leao
- c. the pale blue water
- d. the marine life

7) Which type of beach would probably appeal to the author the most?

- a. busy, near a city, with lots of beach activities
- b. warm, isolated, a little wild, with rich animal life
- c. trendy, with a distinctive cultural mix
- d. crowded, with music and dance, blue water and palm trees

5. Make up questions to the contents of the text.

Text № 15

Land of fire and ice

Never mind its chilly name – as a travel destination, Iceland is hot!

With the Atlantic Ocean to its south and the Greenland Sea to its north, Iceland is Europe's westernmost country, with the world's most northerly capital city, Reykjavík. Viking explorers *migrated* to Iceland from northern Europe in 930 A.D., when they established the world's first parliament. The country's national language can still be traced to the one spoken by the Vikings over 1,000 years ago. Today, Iceland has population of just over 310,000, spread over 100,000 square kilometers (about 40,000 square miles). Despite its small size, there are many reasons to visit this remarkable country.

City of Culture

Most visitors' first port of call is Reykjavík, a small and clean city known for its colorful and stylish *architecture*. The city's downtown area is lined with shops, art galleries, cafés, and bookstores. In 2000, Reykjavík was awarded the title of Europe's City of Culture, thanks to its art and museum scenes, and lively nightlife.

The good news for visitors is that Iceland's temperatures are fairly mild, even in the winter when they stay at around four degrees Celsius (40° F). During winter months, nights are long, and the northern lights become visible, lighting up the night sky with a *spectacular* natural display.

In summer, the country gets almost 22 hours of daylight, and native Icelanders and visitors alike enjoy partying outdoors until dawn.

Hot Springs

Iceland is one of the most volcanically active nations in the world, and there are a number of thermal (hot water) springs around the island. All are heated *naturally* by underground volcanic activity. In fact, Iceland *converts* energy generated by these springs into electricity, which powers and heats people's homes and businesses. As a result, Iceland burns very little fossil fuel, such as oil and gas, and has some of the cleanest air in the world.

One of Iceland's most popular hot springs is the Blue Lagoon, a huge lake of bright blue seawater just outside Reykjavik. Surrounded by volcanoes and lava fields, the Blue Lagoon receives more than 300,000 visitors a year. After a long day's sight-seeing or a long night of partying, visitors can relax their muscles and release their *tension* in the lagoon's steaming hot water, which has an average temperature of about 38 degrees (100° F). Some believe the waters are able to *cure* certain illnesses and improve skin quality.

Caves and Monsters

Most of the inner part of Iceland is uninhabited and accessible only by truck or other *vehicle*. Nevertheless, there is a range of outdoor activities to enjoy elsewhere in the country, particularly along the coasts: "Iceland is an adventure," said Sol

Squire, whose Icelandic company organizes adventure trips around the country. "We have Europe's biggest glaciers, active volcanoes, cave explorations, and skiing."

One of Iceland's most popular attractions is caving. Exploring Iceland's unusual lava caves most of which formed more than 10,000 years ago, requires only basic caving knowledge and equipment. Ice caves, however, are more challenging and require special clothes and hiking tools. The best-known ice caves are in Vatnajökull—a layer of ice which, at 8,000 square kilometers (3,000 square miles), is Iceland's—and Europe's-largest glacier. It also happens to be situated just above an active volcano!

If exploring caves and glaciers doesn't interest you, head south, just outside the town of Vík, to check out the huge rock formations that were once believed to be *monsters* turned into stone. These are a dramatic part of the scenery on one of Iceland's most magnificent black-sand beaches.

The Golden Circle

And finally, no trip to Iceland would be complete without a visit to the Golden Circle, a pathway northeast of Reykjavík that connects Gullfoss (a huge "Golden Waterfall"), the hot springs region of Geysir, and Thingvellir National Park. The mid-Atlantic fault that runs through Iceland is *literally* pulling the island apart. Nowhere is this more evident than in the Thingvellir Valley, where the land is actually separating and the stony ground beneath your feet frequently shifts. Hold on while you hike!

1. Make up a situation using words in *italics* from the text.

2. Give definitions to the following words: architecture, convert, cure, literally, spectacular, tension, vehicle.

3. Find English equivalents to the following phrases in the text: благодаря искусству, ископаемое топливо, исследование пещер, национальный язык, посетить это замечательное место, термальные источники, хорошая новость для посетителей, центр города, чистый город, яркая и стильная архитектура.

4. Multiple Choice. Choose the best answer for each question.

1) Which of the following is closest in meaning to: Despite its small size, there are many reasons to visit this remarkable country?

a. There are many reasons this country is considered to be too small to visit.

b. There are a lot of attractions in this interesting country even though it is so small.

c. This is an unusual country to visit because it is so small.

d. Small countries are usually perceived as boring, but Iceland is different.

2) Which is the best place to go if you like to party?

a. Vatnajökull

b. Reykjavik

c. the Blue Lagoon

d. Thingvellir Valley

3) What are the hot springs of the Blue Lagoon heated by?

a. solar energy

b. volcanic activity

c. electrical power

d. fossil fuels

4) In the sentence (Nowhere is this more evident than in the Thingvellir Valley, where the land is actually separating and the stony ground beneath your feet frequently shifts.), the word *evident* could be replaced with _____ .

a. dangerously separated

b. strangely beautiful

c. quietly formed

d. easily seen

5) What is the Golden Circle?

a. the most popular area to visit in Reykjavik's city center

b. scenic walk around the Blue Lagoon

a pathway that connects a park, a waterfall and hot springs

a road that goes around the coast of Iceland

6) Where is the mid-Atlantic fault most noticeable?

a. Reykjavik

b. the Blue Lagoon

c. Thingvellir Valley

d. Geysir

7) Who is this passage probably written for?

a. tourists

b. scientists

c. business travelers

d. Icelanders

5. Make a report "My favourite summer resort" (25 sentences).

Text № 16

Powering the future

Despite modern society's heavy dependence on fossil fuels for energy, most people are aware that the supply of these fuels is *finite*. As oil, in particular, becomes more costly and difficult to find, researchers are looking at alternative energy sources, including solar, wind, and even nuclear power. But which *substitute* – if any – is the right one?

Solar

Solar panels catch energy directly from the sun and convert it into electricity. One of the world's largest solar power stations is located near Leipzig, Germany, where more than 33,000 solar panels generate enough energy to power about 1,800 homes. But unlike the burning of fossil fuels, the process used to create all that solar energy produces no emissions.

Today, however, solar provides less than one percent of the world's energy, primarily because the cost of the panels is still very high. And price is only one issue. Clouds and darkness also cause solar panels to produce less energy, which requires one to have additional power sources (such as batteries) available.

Some scientists think the solution to this problem can be found in space—which they say is the ideal place to gather energy from the sun. With no clouds and no nighttime, a space-based solar power station could operate constantly. These stations would send the power back to Earth, which could then be turned into electricity for consumption.

Advocates of solar space stations say this technology would require a lot of money initially, but eventually it could provide continuous, clean energy that would be cheaper than other fuels. Also, unlike other energy sources, solar power from space will last as long as the sun shines and will be able to *guarantee* everyone on Earth all the energy they need.

Wind

Wind – the fastest growing alternative energy source – is another way of collecting energy from the sun. Unlike solar power, however, it works well on cloudy days.

All over Europe, incentives designed to decrease the dependence on oil and coal have led to a *steep* increase in wind-powered energy. Today Europe leads the world in wind power, with almost 35,000 megawatts, the *equivalent* of 35 large coal-powered plants. North America remains a distant second, with just over 7,000 megawatts.

Despite its successes, some oppose wind-power development, saying the turbines are both noisy and ugly. Just outside England's Lake District, a protected national park, 27 wind towers are planned, each about 40 meters (130 feet) tall. Many locals are protesting. "This is a high-quality landscape," says one local home owner. "They shouldn't be putting those things in here."

There are other challenges too. If the wind doesn't blow, the turbines don't have the capacity to produce sufficient energy. As a result, other power sources are needed. In contrast, a strong wind can create too much power. In cases like this, the energy company must sell the extra power at a much-reduced rate, which is not good for business.

What's needed for both wind and solar is a way to store a large energy surplus so that it can later be turned into electricity. However, most systems are still decades away from making this a reality. On the plus side, both wind and solar enable people to generate their own energy where they live: people can have their own windmills or solar panels, with batteries for calm days.

Nuclear

In the 1970s, nuclear was the energy alternative. Nuclear power produces vast amounts of electricity more cheaply than gas or coal, with no carbon emissions. For a number of years in the 1980s and '90s, however, use of nuclear power *declined* due to accidents, concerns about nuclear waste storage and *disposal*, and high construction costs.

Today, times are changing. Worldwide about 432 plants now generate 13 percent of the planet's electric power, and some countries have invested heavily in nuclear energy. France, for instance, gets 78 percent of its electricity from nuclear power. China has started to build one or two new plants a year, and Japan and India have also begun to *utilize* nuclear energy on a large scale. However, there are still concerns about the safety of nuclear power, as seen most recently at the Fukushima nuclear power plant in Japan. The country had to close its nuclear reactor when the plant was hit by a tsunami and, as a consequence, began releasing substantial amounts of radioactive materials. Many still believe, however, that nuclear power is one of the future's greenest energy alternatives.

In the end, are any of these sources alone the answer to our current energy problems? The short answer is no, but used in some combination – along with other power sources – we may find ways to reduce and eventually eliminate our dependence on fossil fuels.

1. Make up a dialogue using words in *italics* from the text.

2. Give definitions to the following words: decline, disposal, equivalent, guarantee, finite, substitute, utilize.

3. Find English equivalents to the following phrases in the text: альтернативные источники энергии, в больших масштабах, всё ещё очень высокие, в таком случае, дополнительная энергия, для потребления, обеспечивать энергией, сбор энергии, трудно найти,

4. Multiple Choice. Choose the best answer for each question.

1) What is this reading mainly about?

a. possible replacements for fossil fuels for energy

- b. the various causes of the energy crisis the world over
- c. the benefits of solar power over other alternate energy sources
- d. problems caused by our overdependence on fossil fuels

2) In the sentence (But unlike the burning of fossil fuels, the process used to create all that solar energy produces no emissions.), the word *emissions* is closest in meaning to _____ .

- a. panels
- b. electricity
- c. pollution
- d. accidents

3) Which of these statements about solar energy is stated in the text?

- a. Solar is currently the biggest contributor to the world's energy.
- b. Solar energy is cheap to produce due to the low price of solar panels.
- c. Solar space stations could be the solution to the energy crisis.
- d. Solar energy can have a harmful effect on the environment.

4) What is NOT mentioned as a disadvantage of wind power?

- a. Strong winds produce too much power.
- b. Strong winds can damage the turbines.
- c. The turbines create a lot of noise.
- d. The turbines are seen as ugly.

5) Which of these statements is true about nuclear energy according to the reading?

- a. It is a more expensive form of energy than coal or gas.
- b. It produces a lot of carbon waste.
- c. Safety concerns made nuclear energy unpopular for several decades.
- d. Nuclear energy is becoming less popular than other energy sources.

6) Which country gets most of its power from nuclear power?

- a. France
- b. Germany
- c. India
- d. China

7) Which question is closest in meaning to *In the end, are any of these sources alone the answer to our current energy problems?*

a. Is there an energy source that can solve all of our energy problems on its own?

b. Can our current energy problems be solved by making sure we stop burning fossil fuel?

c. Can we solve our energy problems by using all the alternative energy sources together?

d. Is finding a new alternate to fossil fuels the only way to solve our energy problems?

5. Write an essay "The best alternative energy source" (150-200 words).

Text № 17

The Ultimate Trip

Though we have sent unmanned spacecraft to Mars and other parts of our solar system for *decades*, humans haven't ventured more than 650 kilometers (400 miles) from Earth since 1973. However, there is increasing interest in sending new missions – both robotic and manned – into space. But unlike in the past, this renewed interest is not primarily being driven by government agencies. Instead, private companies are leading today's new age of space exploration.

Take, for example, SpaceX, a private company based near Los Angeles. In early 2012, it sent an unmanned rocket to the International Space Station (ISS). Until now, astronauts and supplies from the U.S. have been transported by space shuttle to the ISS. SpaceX and other companies are competing to replace the U.S. government shuttle and become the ISS's supply ship.

Another company called Planetary Resources – which is *backed* by billionaires from Google – plans to use robotic spacecraft to mine asteroids for *precious* metals. One that the company hopes to find is platinum, a metal so rare on Earth that an ounce (about 28 grams) costs \$1,600. Robots will have to travel millions of kilometers to locate and mine asteroids, and this *requires* technology that doesn't exist yet.

This isn't stopping companies like Planetary Resources and others from trying, though. They are investing millions into research, hoping to create tools that will make space mining possible. "This is the beginning of the new space age," says Mason Peck, who works for NASA, the U.S. space organization. "The energy we see now – the economic motivation to go into space – we haven't seen that before."

For centuries, economics has driven exploration. A thousand years ago, merchants risked the dangers of the Silk Road to reach the markets of China. In the 15th century, European ships traveled to new worlds, searching less for knowledge than for gold and spices." Historically, the driver has always been the search for resources," explains investor Peter Diamandis. If you want people to explore space, he says, create an economic incentive.

Entrepreneur Elon Musk, the *founder* of SpaceX and other companies, is spending a large part of his *fortune* on his own space program. SpaceX, as mentioned earlier, is developing a new rocket that can transport supplies to the ISS. It will be *capable* of carrying twice the cargo of the U.S. government's space shuttle, Musk says, for about one-fifth the price. He wants to reduce costs by creating reusable rockets – in the same way that we reuse a plane after a flight. "Creating reusable rockets will be *extremely* difficult, and most people think it's impossible, but I do not," Musk says. "If we threw away airplanes after every flight, no one would fly."

For Musk, creating reusable rockets is part of a much bigger plan: He wants to establish a human colony on Mars. NASA has had enormous success on Mars with unmanned spacecraft, but it has yet to launch a manned mission. Musk says SpaceX could put astronauts on Mars within 20 years, and then keep sending them for decades after that. "We can't send one little group to Mars," he says. "We have to take millions of people and lots of equipment to Mars to make it a self-*sustaining* civilization." It will be the hardest thing that humanity has ever done, but Musk thinks his company can do it and he's eager to see it happen. "It's about making life multi-planetary," he says. "It's about getting out there and exploring the stars."

1. Make up sentences using words in *italics* from the text.

2. Give definitions to the following words: capable, decade, extremely, fortune, founder, precious, require.

3. Find English equivalents to the following phrases in the text: драгоценные металлы, инвестировать миллионы в исследование, исследование космоса, международная космическая станция, огромный успех, повышать интерес, снизить затраты, создавать инструменты, частная компания, шёлковый путь,

4. Multiple Choice. Choose the best answer for each question.

1) Which statement about space exploration is NOT true?

- a. In 2012, a private company sent an unmanned rocket to the ISS.
- b. Humans have recently traveled more than 650 kilometers from Earth.
- c. There is newfound interest in manned and unmanned missions to space.
- d. More and more private companies are beginning to explore space.

2) What does *one* refer to in the sentence (One that the company hopes to find is platinum, a metal so rare on Earth that an ounce (about 28 grams) costs \$1,600.)?

- a. one asteroid
- b. one metal
- c. one spacecraft
- d. one reason

3) What could the weird *energy* be replaced with in the sentence ("The energy we see now—the economic motivation to go into space—we haven't seen that before.")?

- a. fuel
- b. investments
- c. enthusiasm
- d. capacity

4) What is the main idea of paragraph 4 (For centuries, economics has driven exploration.)?

a. Making money has always encouraged exploration, and space exploration is no different.

- b. It will take many more resources to convince people to travel to space.
- c. The development of space travel has been slow due to economic reasons.
- d. The search for knowledge is what should drive space exploration rather than economics.

5) What does SpaceX want to do?

- a. build a space station that can replace the ISS.
- b. get the government's approval to transport astronauts to the ISS.
- c. partner with Planetary Resources to mine asteroids for platinum.
- d. develop a reusable rocket that can take supplies to the ISS.

6) In the sentence ("It's about making life multi-planetary," he says.) what does *it* refer to?

- a. putting a few astronauts on Mars
- b. sending several unmanned spacecraft to Mars
- c. making a self-sustaining civilization on Mars
- d. transporting supplies to the ISS

7) When was the U.S. least active in space exploration?

- a. the early 60s to mid-60s
- b. the early 70s to mid-70s
- c. the late 70s to early 80s
- d. the late 80s

5. Make a summary of the text.

Text № 18

Green concerns

Water worries

In the Castile-La Mancha region of south central Spain, Julio Escudero, a 74-years-old former fisherman, fondly recalls an area on the Guadiana River called Los Ojos – "the eyes". Large underground springs bubbled up into the river, where Escudero and his community fished for carp and crayfish. "I would sit in my boat six or

seven meters away and just watch the water coming up," Escudero says. "Now it looks like the moon." Los Ojos doesn't exist anymore: the stretch of the river dried up in 1984. Additionally, 46,000 acres of surrounding wetlands – vital not only to the local people but also to countless species of plants and wildlife – have disappeared.

As farming in the region has increased, La Mancha has witnessed an explosion of well digging in the past 40 years that has lowered the water table and *diverted* water from rivers and streams. The number of wells has grown from 1,500 in 1960 to an official count of 21,000 today, and some experts say the real number, including illegal wells, could *surpass* 50,000.

A global problem

La Mancha is just one of many places facing water *shortages*. This century many countries will face the same dilemma that has confronted the people of Spain: how to balance human needs with the requirements of natural systems that are vital for sustaining life on Earth. The United Nations recently outlined the extent of the problem, saying that 2.7 billion people would face severe water shortages by 2025 if consumption continues at current rates. Today, an estimated 1.2 billion people drink unclean water, and about 2.5 billion lack proper toilets or waste disposal systems. More than 5 million people die each year from diseases related to unclean water. All over the globe, humans are pumping water out of the ground faster than it can be replenished. In this difficult situation, water conservationists, such as Rajendra Singh in India and Neil Macleod in South Africa, are working to find solutions to the water crisis. Both have found innovative ways to improve their local water situations.

A Hero in a Thirsty Land

On arriving at the Indian village of Goratalai, Rajendra Singh was greeted by a group of about 50 people. He smiled and addressed the villagers: "How many households do you have?"

"Eighty."

"It's been four years without much rain," said a woman. "And we don't have a proper dam to catch the water."

"Do you have any spots where a dam could go?" asked Singh, 43, who has a full head of black hair and a thick beard, both flecked with gray.

"Yes, two spots."

"Will the whole village be willing to work there?"

"Yes," they replied together.

"I would like to help you," Singh told them, "but the work has to be done by you. You will have to provide one-third of the project through your labor, and the remaining two-thirds I will arrange."

The villagers clapped, the women started to sing, and the group hiked to a place in the nearby rocky hills. Singh examined the area, and after a few minutes, declared, "This is an ideal site." His organization would provide the engineering advice and materials; the villagers would supply the work. The nine-meter-high (30-foot-high) earthen dam and reservoir, known as a *johad*, could be finished in three months, before the start of the rainy season. If the rains were plentiful, the reservoir would not only provide supplemental surface water for drinking and agriculture, but would also replenish dry wells. "You will not see the results immediately. But soon the darn will begin to raise the water level in your wells," Singh told the villagers.

Soon Singh was gone, heading to a nearby village that had also requested help building a johad. In recent years, Singh's johads have sprung up all over Rajendra - an estimated 4,500 dams in about 1,000 villages. all built using local labor and native materials. His movement has caught on, he says, because it puts control over water in the hands of villagers. "If they feel a johad is their own, they will maintain it," said Singh. "This is a very sustainable, self-reliant system. I can say confidently that if we can manage rain in India in traditional ways, there will be sufficient water for our growing population."

Waste Not, Want Not

In South Africa, Neil Macleod took over as head of Durban Metro Water Services in 1992. The situation he found was a catastrophe. Durban had one million people living in the city and another 1.5 million people who lived in poverty just outside it. Macleod and his engineers determined that the entire city was rife with broken wa-

ter pipes, *leaky* toilets, and faulty plumbing *whereby* 42 percent of the region's water was simply being wasted. "We *inherited* 700 reported leaks and bursts. The water literally just ran down the streets. Demand for water was growing four percent a year, and we thought we'd have to build another dam by 2000," recalled Macleod.

Macleod's crew began repairing and replacing water pipes. They put water meters on residences, replaced eight-liter toilets with four-liter models, and changed wasteful showers and water faucets. To ensure that the poor would receive a basic supply of water, Macleod installed tanks in homes and apartments to provide 190 liters (50 gallons) of water a day free to each household. Water consumption in the city of Durban is now less than it was in 1996, even as 800,000 more people have received service. Through sensible water use, Durban's conservation measures paid for themselves within a year. Macleod has assured the city that no new dams will be needed in the coming decades, despite the expected addition of about 300,000 inhabitants.

In Durban, Macleod has also turned to water recycling. At the water recycling plant, wastewater is turned into clean water in just 12 hours. According to Macleod, most people are unable to *discern* a difference between the usual city drinking water and the treated wastewater, although it is actually intended for industrial purposes. Macleod boasts, "Go to many areas of the world, and they're drinking far worse water than this."

Some people still hope that new technology, such as the desalination of seawater, will solve the world's water problems. "But the fact is, water conservation is where the big gains are to be made," says Sandra Postel, a leading authority on freshwater issues and director of the Global Water Policy Project. The *dedication* and resourcefulness of people like Rajendra Singh and Neil Macleod offer *inspiration* for *implementing* timely and lasting solutions to the world's water *concerns*.

1. Make up a situation using words in *italics* from the text.

2. Give definitions to the following words: concerns, dedication, discern, divert, implementing, inspiration, surpass.

3. Find English equivalents to the following phrases in the text: весь город, инженерный совет, количество колодцев, найти инновационные способы, найти решение, нехватка воды, питьевая вода, поставка воды, сидеть в лодке, чистая вода.

4. Multiple Choice. Choose the best answer for each question.

1) Another title for this reading could be _____ .

- a. Water for the Rich, Hot for the Poor
- b. Why We Waste Water: Two Points of View
- c. Water Shortages and Problem Solvers
- d. Politics and Water: Fighting for a Drink

2) Which of these statements about Castile-La Mancha is NOT true?

- a. Its situation is common to many places around the world.
- b. Overfishing has caused a great deal of environmental damage.
- c. Illegal well digging is a significant problem.
- d. The Los titles area has been dry for over 30 years.

3) How many people worldwide don't have proper toilets or water disposal systems?

- a. 1.2 billion
- b. 2.5 billion
- c. 2.7 billion
- d. more than 5 billion

4) What is Rajendra Singh's solution to water shortages?

- a. build dams and reservoirs
- b. pump more groundwater
- c. fix leaky pipes
- d. desalinate seawater

5) To what does Singh attribute the success of the *johads*?

- a. their cheap price
- b. a higher than normal rainfall
- c. the ability of villagers to sell excess water

d. giving control of the water to villagers

6) Which of these methods did Macleod NOT make use of in Durban?

a. repairing water pipes

b. replacing toilets

c. installing water meters

d. building a new dam

7) Which of the following did Sandra Postel mean by “water conservation is where the big gains are to be made“?

a. Water conservation is an opportunity for large profits for businesses.

b. Water conservation is the most effective method to address water shortages.

c. Water conservation technology is still in need of many improvements.

d. Water conservation is required by law in order to ensure large gains.

5. Make up questions to the contents of the text.

Text № 19

Technology as trash

An Electronic Wasteland

As the morning rain stops in Accra, the capital city of Ghana and the sun heats the humid air, a terrible-smelling black smoke begins to rise above the vast Agbogbloshie Market. Past the vegetable and tire merchants is a scrap market filled with *piles* of old and broken electronics waste. This waste, consisting of broken TVs, computers, and monitors, is known as "e-waste." Further beyond the scrap market are many small fires, fueled by old automobile tires, which are burning away the plastic covering from valuable wire in the e-waste. People walk through the smoke—a highly poisonous mixture of chemicals—with their arms full of brightly colored computer wire. Many of them are children.

Israel Mensah, 20, explains how he makes his living here. Each day, scrap sellers bring loads of old electronics. Mensah's friends and family buy a few computers or TVs. They break them apart to remove valuable metals and wires, as well as any parts that can be resold. Then they burn the plastic covering off the wire and sell

it to replenish their supply of e-waste. The key to making money is speed, not safety. "The gas goes to your nose, and you feel something in your head," Mensah says as he knocks his fist against the back of his head. "Then you get sick in your head and your chest." Broken computer and monitor cases are unwanted and thrown in a nearby lagoon. The next day, the rain will wash them into the ocean.

The Problem of E-waste

E-waste is being produced on a scale never seen before. Computers and other electronic equipment become *obsolete* in just a few years, leaving customers with little choice but to buy newer ones to keep up. Tens of millions of tons of computers, TVs, DVD players, monitors, cell phones, and other equipment are *discarded* each year.

Sadly, in most of the world, the bulk of all this waste ends up in landfills. Here, it poisons the environment; e-waste contains a variety of toxic *substances* such as lead, mercury, and arsenic that leak into the ground. Recycling is in many ways the ideal solution to the problem. E-waste contains significant amounts of valuable metals such as silver, gold, tin and copper that make it attractive to recycle. In theory, recycling gold from old computers is far more efficient – and less environmentally destructive – than digging it from the earth. The problem is that a large percentage of e-waste that is dropped off for recycling in wealthy countries is sold and diverted to the developing world – to countries like China. As quantities of e-waste increase worldwide, it poses an increasing threat to the health of people living in the developing world.

To address the problem of the international trade in e-waste, 170 nations signed the 1989 Basel Convention, an agreement that requires developed nations to *notify* developing nations of *hazardous* waste shipments coming into the country. Then, in 1995, after pressure from environmental groups and developing nations, the Basel Convention was modified to ban hazardous waste shipments to poor countries completely. Although the ban hasn't yet taken effect, The European Union, where recycling infrastructure is well developed, has already written it into their laws. Cline law holds manufacturers responsible for the safe disposal of electronics they produce.

David and Goliath

Companies like Creative Recycling Systems in Tampa, Florida, are hoping to profit from clean e-waste recycling. The key to their business is a *colossal*, building-size machine that is able to separate electronic products into their component materials. Company president Jon Yob called his project "David," because it has to do battle with a "Goliath" in the form of the huge quantity of e-waste in the United States.

David is able to avoid the contamination occurring in places like the market in Accra. As the machine's steel teeth break up computers, TVs, and other e-waste, toxic substances are naturally released, but there are machines installed inside David whereby all the toxic dust is removed from the process. "The air that comes out is cleaner than the ambient air in the building," explains vice president Joe Yob, Jon's brother.

David can handle some 70,000 tons of electronics a year. Although this is only a fraction of the total, it wouldn't take many more machines like David to process the entire United States' output of high-tech trash. Unfortunately, under current policies, domestic processing of e-waste is not compulsory, and while shipping waste abroad is ethically questionable, it is still more profitable than processing it safely in the United States. "We can't compete economically with people who do it wrong, who ship it overseas." says Joe Yob. The company is hoping that the U.S. government will, sometime in the near future, create laws *detering* people from sending e-waste overseas.

Ultimately, shipping e-waste overseas may actually come back to harm the developed world. Jeffrey Weidenhamer, a chemist at Ashland University in Ohio, bought some jewelry made in a developing country for his class to analyze. It was *distressing* that the jewelry contained high amounts of lead, but not a great surprise, as jewelry with lead has turned up before in U.S. stores. More revealing were the quantities of metals such as copper and tin mixed in with the lead. Weidenhamer argued in a scientific paper that the proportions of these metals suggest that the jewelry was made from recycled computer parts.

Since the developed world is sending large quantities of materials containing lead to developing nations, it's to be expected that those countries will make use of them in their manufacturing processes. "It's not at all surprising things are coming full circle and now we're getting contaminated products back," says Weidenhamer. In a global economy, it's no longer possible to get rid of something by sending it to other countries. As the old saying goes "What goes around comes around".

1. Make up a dialogue using words in *italics* from the text.

2. Give definitions to the following words: colossal, discard, distress, hazardous, notify, pile, substance.

3. Find English equivalents to the following phrases in the text: влажный воздух, в невиданных масштабах, значительное количество, международная торговля, развивающиеся государства, переработанные компьютерные детали, производственный процесс, токсичные вещества, ценные металлы и провода, электронное оборудование, .

4. Multiple Choice. Choose the best answer for each question.

1) What is the main idea of the reading?

- a. E-waste provides business opportunities for many people.
- b. E-waste is enriching the developing world.
- c. The world is facing a serious e-waste problem.
- d. Recycling of e-waste should be stopped.

2) Why are there fires at the Agbogbloshie Market?

- a. to burn unwanted computer and monitor cases
- b. to bum off the covering from metal wires
- c. to keep people warm as they recycle e-waste
- d. to signal to scrap sellers that e-waste is available

3) In the sentence (Computers and other electronic equipment become *obsolete* in just a few years, leaving customers with little choice but to buy newer ones to keep up.), what does the phrase *keep up* mean?

- a. to keep the computer they already have
- b. to get educated about computers currently sold

- c. to maintain a positive attitude toward computers
 - d. to obtain the latest, best-performing computers
- 4) What was the Basel Convention modified to do in 1995?

- a. remove hazardous chemicals from e-waste
- b. stop hazardous waste shipments to poor countries
- c. set up safer recycling centers in developing countries
- d. notify developing countries of dangerous shipments

5) Which problem does Creative Recycling Systems have?

- a. It takes too long to build large recycling machines.
- b. They can't handle all the e-waste produced in the U.S.
- c. It costs more to use their service than to ship e-waste abroad.
- d. They are breaking current laws by shipping e-waste overseas.

6) Why does Jeffrey Weidenhamer think that the jewelry he bought was made from recycled computer parts?

- a. Because the jewelry came from Ghana.
- b. Because the jewelry came from a developing country.
- c. Because the metal contained large amounts of lead.
- d. Because the metal contained certain proportions of copper and tin mixed

with lead.

7) In the sentence it says, "What goes around comes around." What does this mean?

- a. Your actions have consequences that will eventually affect you.
- b. Whether or not your actions are correct, bad things will happen to you.
- c. No matter how unfairly you are treated, continue to treat others fairly.
- d. Don't worry about the actions of others, because you can't control them.

5. Make a report "Negative impact of e-waste" (25 sentences).

Text № 20

Renewable Energy

Plugging into the Sun

Sunlight bathes us in far more energy than we could ever need – if we could just catch enough.

Early on a clear November morning in the Mojave Desert, the sun is barely touching the peaks of the McCullough Range with a cool pink glow. Behind them, a full moon is sinking over the gigawatt glare of Las Vegas. Nevada Solar One is sleeping. But the day's work is about to begin.

It is hard to imagine that a power *plant* could be so beautiful: 250 acres of gently curved mirrors lined up in long troughs like canals of light. Parked facing the ground overnight, they are starting to awaken – more than 182,000 of them – and follow the sun.

"Looks like this will be a 700-degree day," says one of the operators in the control room. His job is to monitor the rows of mirrors as they concentrate sunlight on long steel pipes filled with circulating oil, heating it as high as 750 degrees Fahrenheit (400°C). The heat produces steam, driving a turbine and dynamo, pushing as much as 64 megawatts onto the grid – enough to electrify 14,000 households or a few Las Vegas casinos.

When Nevada Solar One came on line in 2007, it was the first large solar plant to be built in the United States in more than 17 years. During that time, solar technology blossomed elsewhere. The owner of Nevada Solar One is a Spanish company, Acciona; the mirrors were made in Germany.

Putting on hard hats and dark *glasses*, Cable and I get into his pickup and drive slowly past row after row of mirrors. Men with a water truck are hosing down some. "Any kind of dust affects them," Cable says. On a clear summer day with the sun directly overhead, Nevada Solar One can convert about 20 percent of the sun's rays into electricity. Gas plants are more efficient, but this fuel is free. And it doesn't emit planet-warming carbon dioxide.

"If we talk about geothermal or wind, all these other sources of renewable energy are limited in their quantity," Eicke Weber, director of the Fraunhofer Institute for Solar Energy Systems, in Freiburg, Germany, told me last fall. "The total power needs of the humans on Earth is approximately 16 terawatts," he said. (A terawatt is a trillion watts.) "In the year 2020 it is expected to grow to 20 terawatts. The sunshine on the solid part of the Earth is 120,000 terawatts. From this perspective, energy from the sun is virtually unlimited."

Tapping the Sun

Solar energy may be unlimited, but its potential is barely tapped. "Right now solar is such a small fraction of U.S. electricity production that it's measured in tenths of a percent," said Robert Hawsey, an associate director of the National Renewable Energy Laboratory (NREL) in Golden, Colorado. "But that's expected to grow. Ten to 20 percent of the nation's peak electricity demand could be provided by solar energy by 2030."

Achieving that level will require government help. Nevada Solar One was built because the state had not set a *deadline* requiring utilities to generate 20 percent of their power from renewable sources by 2015. During peak demand, the solar plant's electricity is almost as cheap as that of its gas-fired neighbor – but that's only because a 30 percent federal tax credit helped offset its construction costs.

The aim now is to bring down costs and reduce the need for subsidies and incentives. To achieve this, NREL's engineers are studying mirrors made from lightweight polymers instead of glass and receiving tubes that will *absorb* more sunlight and lose less heat. They're also working on solar power's biggest problem: how to store some of the heat produced during daylight hours for release later on.

Power plants such as Nevada Solar One use solar thermal energy (STE) technology, in other words collecting the sun's rays via mirrors to produce thermal energy (heat). Another method is to convert sunlight directly into electricity with photovoltaic (PV) *panels* made of semiconductors such - as silicon. Back in the 1980s, an engineer named Roland Hulstrom calculated that if PV panels covered just three-tenths of a percent of the United States, they could electrify the entire country.

Twenty years later, PV panels still contribute only a tiny amount to the nation's electricity supply. But on rooftops in California, Nevada, and other states with good sunshine and tax incentives, they are increasingly common, almost as familiar as air conditioners. Though not yet as developed as solar thermal, they may have a brighter future. Two American companies, First Solar and Nanosolar, say they can now *manufacture* thin-film solar cells at a cost of around a dollar a watt – close to what's needed to compete with fossil fuels.

Germany's Solar Solution

On a cold December morning west of Frankfurt, Germany, fog hangs frozen in the trees, and clouds block the sun. In the town of Morbach, the blades of a 330-foot – high wind turbine appear and disappear in the gloom. Down below, a field of photovoltaic panels struggle for light. Considering its unpredictable weather, who would have thought that Germany would transform itself into the largest producer of photovoltaic power in the world?

A fraction of Germany's five gigawatt photovoltaic power comes from centralized plants like the one at Morbach. With land at a *premium* in Germany, solar panels can be found mounted on rooftops, farmhouses, even on soccer stadiums and along the autobahn. The panels, dispersed across the German countryside, are all connected to the national grid.

The solar boom has completely transformed towns like “sunny Freiburg,” as the tourist brochures call it, which sits at the edge of the Black Forest in the southern part of the country. Towering walls of photovoltaics greet visitors as they arrive at Freiburg's train station. Across the street from a school covered with photovoltaic panels is Solarsiedlung (“solar settlement”), one of the town's condominium complexes.

“We are being paid for living in this house,” said Wolfgang Schnurer, one of Solarsiedlung's residents. The day before, when snow covered the roof, Schnurer's system produced only 5.8 kilowatt-hours, not enough power for a German household. But on a sunny day in May it *yielded* more than seven times that much.

In Germany, regulations require utility companies to pay even the smallest PV producers a premium of about 50 euro cents a kilowatt-hour. In 2008, Sehnureris personal power plant yielded over 6,000 kilowatt-hours, more than double what the family consumed. ‘When they subtracted their usage from the amount they produced, the family found they were more than 2,500 euros (nearly \$3,700) in profit.

Anybody who installs a PV system is guaranteed above-market rates for 20 years—the equivalent of an 8 percent annual return on the initial *investment*. “It is an ingenious mechanism,” Eicke Weber said. “I always say the United States addresses the idealists, those who want to save the planet. In Germany the law addresses anyone who wants to get 8 percent return on his investment for 20 years.”

In total, Germany now generates more than 2,000 gigawatt-hours of electricity annually from solar energy, whereas the U.S. generates less than half this amount. The largest photovoltaic installation in the United States – at Nellis Air Force Base just outside Las Vegas—is only about the 2–5th largest in the world. Nearly all the bigger ones are located in either Germany or Spain. But in the U.S., too, there is a gathering sense that the time for solar energy has arrived – if there is a commitment to jump-start the technology. “Originally it seemed like a pie-in-the-sky idea,” said Mielielle Price, the energy manager at Nellis. “It didn’t seem possible.” Many things seem possible now.

1. Make up sentences using words in *italics* from the text.

2. Give definitions to the following words: absorb, glasses, investment, manufacture, premium, plant, yield.

3. Find English equivalents to the following phrases in the text: непредсказуемая погода, поглощать солнечный свет, приблизительно 16 тераватт, солнечный день, солнечный луч, солнечная энергия, терять меньше тепла, трудно представить, углекислый газ, южные части страны.

4. Multiple Choice. Choose the best answer for each question.

- 1) The author seems surprised by Nevada Solar One because it _____ .
- a. is mere attractive than a typical power plant
 - b. can provide electricity for many households

- c. is more efficient than ether solar power plants
- d. heats oil to very high temperatures

2) What is the job of the men with the water truck in paragraph 5 (from the sentence, *Putting on hard hats and dark glasses, Cable and I get into his pickup and drive slowly past row after row of mirrors.*)’?

- a. to pump water that will then be heated
- b. to clean the surface of some of the mirrors
- c. to provide the workers with drinking water
- d. to cool the solar plant

3) By how much will the Earth’s energy needs increase from the time the article was written to 2020?

- a. 4 terawatts
- b. 16 terawatts
- c. 20 terawatts
- d. 24 terawatts

4) The phrase *barely tapped* (Solar energy may be unlimited, but its potential is barely tapped.) indicates that _____ .

- a. the use of solar energy has been growing rapidly
- b. someday, much more solar energy can be utilized
- c. the supply of solar power will never meet the demand
- d. no one knows how much solar energy can be generated

5) Which of these is NOT mentioned in paragraph 9 (from the sentence, *The aim now is to bring down costs and reduce the need for subsidies and incentives.*) as a way to cut prices for solar energy production?

- a. making mirrors from different materials
- b. designing tubes that take in mere sunlight and held heat better
- c. obtaining mere subsidies from the government
- d. finding a way to store heat for use at night

6) What does the author imply in paragraph 14 (from the sentence, *The solar boom has completely transformed towns like “sunny Freiburg,” as the tourist brochures call it, which sits at the edge of the Black Forest in the southern part of the country.*) about the town of Freiburg, Germany?

- a. it was the first town with a large-scale solar plant.
- b. It does not really get that much sunshine.
- c. Its solar industry helps to attract tourists.
- d. It is sunny there throughout the year.

7) What does Wolfgang Schnurer mean when he says, “We are being paid for living in this house”?

- a. “The money we get for producing electricity is greater than our total living costs.”
- b. “The government pays us a salary for maintaining a personal solar power plant.”
- c. “The income from our personal power plant is greater than our energy costs.”
- d. “We receive free housing in exchange for our work for the utility company.”

8) The phrase *pie-in-the-sky* in paragraph 18 (from the sentence, “*Originally it seemed like a pie-in-the-sky idea,*” said Mielielle Price, the energy manager at Nel-lis.) is closest in meaning to _____ .

- a. unrealistic
- b. brilliant
- c. believable
- d. unwelcome

5. Retell the text.

VOCABULARY

Text № 1

form – создавать, строить (план)

trip – поездка

ancient – древний

eventually – в конце концов

especially – особенно

abroad – за границей

advice – совет

baggage – багаж

flexible – гибкий

relaxed – расслабленный

polite – вежливый

Text № 2

exciting – увлекательный

century – век

goal – цель

escape – сбежать, избежать, спастись

hit – удариться

extreme – экстремальный

familiar (with) – знакомый (с)

religious – религиозный

tie – привязать

natives – коренные жители

amazing – изумительный

strength – сила

Text № 3

contact – связываться

entire – весь

tools – инструменты

circling – окружающий

search – искать

powerful – мощный

allow – разрешать

identify – определять

space – космос

communicate – общаться

message – сообщение

Text № 4

survive – выживать

spread out – распространяться

independent – независимый

neighbour – сосед

advance – продвижение

medicine – медицина

benefit – приносить пользу

journey – путешествие

settler – поселенец

surface – поверхность

Text № 5

responsible – ответственный

occur – оказываться

frequently – часто

potential – вероятность

warn – предупреждать
rely on – полагаться
direction – направление
terrifying – ужасный
blow – дуть
skilled – опытный

Text № 6

destroy – разрушать
damage – повреждать
middle – центр
race – мчаться
fight – бороться
equipment – оборудование
majority – большинство
height – рост, высота
employed – работающий
capable – способный, квалифицированный

Text № 7

oxygen – кислород
significant – значительный
summit – вершина
achieve – достигать
path – тропа
section – часть, участок
doubtful – сомнительный
proceed – проследовать
suffer (from) – страдать от
Whatever – что бы ни

Text № 8

resident – житель

ignore – пренебрегать

flood – наводнение, затопить

engineer – инженер

sector – отрасль, сектор, участок

exposed – подверженный

widespread – широко распространять

distribute – распределять

currently – сейчас

hurricane – ураган

sink – тонуть

Text № 9

sweet-sounding – сладко звучащие

cyclone – циклон

slightly – слегка

humid – влажный

vapor – пар, испарение

heat – жара, тепло

liquid – жидкий

blame for – обвинить в

surge – приток, подъем, всплеск

predict – предсказывать

forecast – прогноз

waves – волны

accurate – точный

evacuate – эвакуировать

solution – решение

science – наука

warnings – предупреждения

Text № 10

objective – цель

undertake – осуществлять

journal – дневник, газета, журнал

palace – дворец

admire – восхищаться

perceive – воспринимать

administration – администрация, руководство, управление

mineral – минерал

voyage – путешествие

contribution – вклад

Text № 11

resort -курорт

uncover – обнаружить

unstoppable – неудержимый

solve – решать

melt – таять

environmentalist – эколог, защитник окружающей среды

unexpected – неожиданный

glacier – ледник

slide – скользить

immediate – немедленный, незамедлительный

Text № 12

witness – быть свидетелем

dawn – рассвет

holy – священный

disaster – катастрофа, бедствие

inevitable – неизбежный

monitor – контролировать
expanding – расширение
displace – вытеснять
abandoning – отказавшийся, бросивший

Text № 13

destruction – разрушение
earthquake – землетрясение
random – случайный
zone – зона, район, область
massive – огромный, массивный
precise – точный
laboratory – лаборатория
detect – обнаружить, выявить
drill – бурить
data – данные
track – отслеживать

Text № 14

pursuit – поиск
eager – жаждущий, стремящийся
ultimate – главный, окончательный
magnificent – великолепный
destination – пункт назначения
spoil – портить
isolated – изолированный
rank – занимать место
prohibited – запрещенный
diverse – разнообразный

Text № 15

migrate – мигрировать
architecture – архитектура
spectacular – впечатляющий
naturally – естественно
convert – преобразовать
tension – напряжение
cure – лечить
vehicle – транспортное средство
monster – монстр
literally – буквально

Text № 16

finite – ограниченный
substitute – замена, заменять
advocate – защитник
guarantee – гарантировать, обеспечивать
steep – крутой, резкий
equivalent – эквивалент, аналог
decline – сокращать
disposal – удаление, сброс
utilize – использовать

Text № 17

decade – десятилетие
back – поддерживать
precious – драгоценный
require – требовать
founder – основатель
fortune – судьба

capable – способный
extremely – чрезвычайно
sustaining – обеспечивающий, поддерживающий

Text № 18

divert – направить
surpass – превзойти
shortage – нехватка
leaky – дырявый, текучий
whereby – согласно которому
inherit – наследовать
discern – различить, определить
dedication – самоотверженность, преданность
inspiration – вдохновение
implementing – внедрение
concerns – проблемы, вопросы

Text № 19

pile – куча
obsolete – устаревший
discard – отказаться
substance – вещество
notify – уведомлять
hazardous – опасный
colossal – колоссальный, огромный
detering – сдерживающий
distressing – тревожный, печальный

Text № 20

plant – завод

glasses – очки

deadline – крайний срок

absorb – поглощать

panel – панель

manufacture – производить

at a premium – на вес золота

yield – приносить результат, доход

investment – инвестиции, вклад

QUESTIONS

- 1) In your opinion, which extreme activity is the most dangerous? Which would you like to try?
- 2) Do you think life exists on other planets? Why or why not?
- 3) Do you think governments should spend money on space travel and research? Why or why not?
- 4) What are some of the dangers involved with space travel? How can we avoid them?
- 5) How likely do you think building a Mars space colony is? Would you be interested in going there?
- 6) What do you think a tornado chaser does? What skills are important for these jobs?
- 7) Why do you think some people like to visit extreme places?
- 8) Would you like to visit any of these places? Why or why not?
- 9) Have you ever experienced a very serious storm?
- 10) What kind of damage can storms do?
- 11) What part of the world has the worst storms?
- 12) What kind of natural disasters can you think of?
- 13) What natural disasters occur in your country? How do people and the government respond to them?
- 14) Who are some great explorers from history?
- 15) What places remain to be explored today?
- 16) Would you like to be an explorer? Why or why not?
- 17) Are people worried about global warming where you live?
- 18) What changes could occur if the world gets warmer in the future?
- 19) What can individual people do about global warming? What can government do?
- 20) Where do you think is the safest place in the world to live? Which is the most dangerous? Why?
- 21) What makes a good place for a vacation?

- 22) Why do you think islands are so popular with vacations?
- 23) What do you think can be done to preserve beautiful beaches from the negative effects of the tourist trade?
- 24) What type or types of tourists do you think Iceland would appeal to? Why?
- 25) What are the advantages and disadvantages of solar power?
- 26) Aside from solar power, what are some alternate ways of producing energy?
- 27) In what ways could people in your country reduce their energy consumption?
- 28) Do you think you use more or less water than the average person where you live?
- 29) What do you think the expression 'Waste not, want not' means?
- 30) Which of the water conservation strategies in the reading do you think would be most effective in your country? Why?
- 31) In what ways do you think electronic products can be dangerous to your health?
- 32) What do you think happens to old phones, TVs, or computers when they are thrown away?
- 33) What steps not mentioned in the passage can people or governments take to address the problem of e-waste in the world?
- 34) Which countries are world leaders in renewable energy?
- 35) Which parts of the world receive the greatest amount of solar radiation?
Where are most of the largest solar power plants concentrated?

ЛИТЕРАТУРА

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Учебное издание

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ENGLISH IN GEOGRAPHY AND CARTOGRAPHY

Учебное пособие

Компьютерная верстка
Р.М. Абдрахмановой

Подписано в печать 25.02.2021 г.
Бумага офсетная. Печать цифровая.
Формат 60x84 1/16. Гарнитура «Times New Roman». Усл. печ. л. 4,9.
Уч.-изд. л. 3,2. Тираж 100 экз. Заказ 173/2.

Отпечатано с готового оригинал-макета
в типографии Издательства Казанского университета

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