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**Экологические проблемы**  
Методические рекомендации

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*Методические рекомендации «Экологические проблемы» предназначены для студентов 1-2 курсов педагогических колледжей. Ценность методических рекомендаций «Экологические проблемы» заключается в том, что он своим содержанием ориентирован на овладение студентами терминологией по экологии окружающей среды. Для студентов педагогических колледжей, а также для студентов других учебных заведений при изучении темы «Экологические проблемы».*

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## Пояснительная записка

Учебно-методические рекомендации по теме «*Экологические проблемы*» предназначено для студентов, обучающихся по специальности: 050146 Преподавание в начальных классах, 050148 Педагогика дополнительного образования: социально-педагогическая деятельность (молодежная политика, организация работы с молодежью и молодежными объединениями), 050148 Педагогика дополнительного образования: изобразительная деятельность и декоративно-прикладное искусство, 44.02.03 Педагогика дополнительного образования. Область деятельности: Медиа культурные технологии, организация средств масс-медиа в ОУ, 050141 Физическая культура для совершенствования знаний и расширения лексического запаса по английскому языку в соответствии с требованиями базисного учебного плана и ФГОС СПО 3-го поколения к обязательному минимуму содержания и уровню подготовки специалистов в среднем профессиональном учебном заведении.

Главная цель пособия – обеспечить обучающихся современными проблематичными текстами для совершенствования навыков чтения литературы в оригинале. Помимо овладения речевыми навыками обучающиеся могут обогатить свой лексический запас, используя данные тексты.

Настоящие учебно-методические рекомендации представляет собой оригинальное пособие, материал которого состоит из аутентичных текстов, взятых из разнообразных зарубежных интернет - сайтов.

В процессе работы над заданиями к текстам в основном осуществляется обучение двум видам чтения: изучающему (детальному) чтению, которое предполагает полное понимание читаемого текста, и ознакомительному, когда понимание составляет 70-75 % информации, содержащейся в тексте. Ознакомительный вид чтения развивает у студентов ряд умений, необходимых впоследствии для чтения.

Работа с текстами построена по 3 этапам: до текстовый, текстовый, после текстовый.

Задания 1 этапа формируют у учащихся механизмы вероятностного прогнозирования и антиципации, и логического понимания. Задания 2 этапа формируют у студентов языковую догадку, логическое понимание, кратковременную и долговременную память. Задания 3. Они разнообразны как по форме и содержанию, так и по коммуникативно-ситуативной соотнесенности.

Данные методические рекомендации могут использоваться преподавателями и студентами, как на занятиях английского языка, так и для самостоятельной работы. Они могут использоваться преподавателями английского языка различных учебных заведений при изучении темы «*Экологические проблемы*»

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## TEXT 1

### 1. Read the text "Ecology "

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about.**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary.**

### Ecology

Ecology is the study that helps to preserve the Earth, its plants and animals. It is also supposed to study the environment and the relationship between human activities and nature. Until recently this relationship was in balance. However, at present times we have to face such ecological problems as acid rain, global warming, loss of rare species, ozone reduction, etc. Many scientists think that it is connected with industrial boom and development of civilization in the world. Building numerous factories people have started to interfere intensively in nature. Every year world industry pollutes the atmosphere with tons of dust and other harmful things. As a result many species of animals and plants disappear forever, including fish and birds. Many large cities suffer from factory smog. Their activity pollutes the air, the water, the forests and the land. Apart from factories there are lots of vehicles in the streets of every more or less developed city. It includes cars, motorbikes, buses, minivans, trucks and other types of transport which use fuel. First of all, they exhaust toxic gases into the air. Secondly, they are considered to be the main noise offenders in the city. This problem progresses as the number of cars increases from year to year. As a result the level of harmful substances in the air also increases. Another problem which is worth mentioning is the tree cutting. Trees are a source of oxygen and clean air. So, by doing this people simply violate the biological balance. All the above mentioned ecological problems are the result of man's careless interaction with nature. In my opinion, environmental protection should become of a global concern and serious measures should be taken to create ecological security.

### Useful vocabulary:

**to preserve**

**acid rain**

**ozone reduction**

**to interfere  
exhaust  
harmful substances**

**2. Agree or disagree with the following statements. Prove your point of view.**

1. Every year world industry pollutes the atmosphere with tons of dust and other harmful things.
2. This problem progresses as the number of cars increases from year to year.
3. All the above mentioned ecological problems are not the result of man's careless interaction with nature.
4. Environmental protection should not become of a global concern and serious measures should be taken to create ecological security.

**3. Answer the following questions on the text:**

1. What does Ecology help to preserve?
2. What do many scientists think that it is connected with industrial boom and development of civilization in the world?

**3. Insert prepositions where necessary.**

1. As a result many species ... animals and plants disappear forever, including fish and birds. 2. Many large cities suffer ... factory smog. 3. Apart ... factories there are lots ... vehicles ... the streets ... every more or less developed city. 2. It includes cars, motorbikes, buses, minivans, trucks and other types ... transport which use fuel. First ... all, they exhaust toxic gases ... the air.

**4. Insert articles where necessary.**

1. Ecology is ... study that helps to preserve ... Earth, its plants and animals. 2. It is also supposed to study ... environment and ... relationship between human activities and nature. 3. Many scientists think that it is connected with industrial boom and development of civilization in ... world.

**6. Give a summary of the text "Ecology"**

**TEXT 2**

**1. Read the text "Environment and ecology"**

**Don't forget to work in the following way:**

- \* **Look through the text to know what it is about.**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**

**\* Look up the words you do not know in a dictionary.**

### **Environment and ecology**

The word environment means simply what is around us. Some people live in a town environment; for others, their environment is the countryside.

Nowadays people understand how important it is to solve the environment problems that endanger people's lives. The most serious environmental problems are: pollution in its many forms (water pollution, air pollution, nuclear pollution), noise from cars, buses, planes, etc., destruction of wildlife and countryside beauty, shortage of natural resources (metals, different kinds of fuel), the growth of population.

There is no ocean or sea, which is not used as a dump. Many seas are used for dumping industrial and nuclear waste. This poisons and kills fish and sea animals. "Nuclear-poisoned" fish can be eaten by people.

Many rivers and lakes are poisoned too. Fish and reptiles can't live in them. There is not enough oxygen in the water. In such places all the birds leave their habitats and many plants die. If people drink this water they can die too. It happens so because industrial produce a lot of waste and pour it into rivers. So they poison water.

Most of the pollution in big cities comes from cars and buses. More and more often people are told not to be in direct sunlight, because ultraviolet radiation from the sun can cause skin cancer. Normally the ozone layer in the atmosphere protects us from such radiation, but if there are holes in the ozone layer ultraviolet radiation can get to the earth. Many scientists think that these holes are the result of air pollution.

Both clean air and clean water are necessary for our health. If people want to survive they must solve these problems quickly. Man is beginning to understand that his environment is not just his own town or country, but the whole earth. That's why people all over the worlds think and speak.

### **Useful vocabulary:**

**to solve the environment problems**

**pollution**

**destruction**

**to poison**

**ozone layer**

**hole**

**to survive**

**2. Agree or disagree with the following statements. Prove your point of view.**

1. Many seas are used for dumping industrial and nuclear waste.
2. If people drink this water they can't die too.
3. Normally the ozone layer in the atmosphere doesn't protect us from such radiation.
4. If people want to survive they must solve these problems quickly.
5. Many scientists think that these holes are the result of air pollution.

**3. Answer the following questions on the text:**

1. What does the word environment mean?
2. What are the most serious environmental problems?
3. What are many seas used for?
4. Why are many rivers and lakes poisoned too?
5. Where does most of the pollution in big cities come from?
6. Many scientists think that these holes are the result of air pollution, don't they?

**5. Translate the following words and phrases without a dictionary.**

1. Problem; 2. serious; 3. industrial; 4. Produce; 5. Ultraviolet radiation; 6. Atmosphere; 7. Normally;

**6. Give a summary of the text "*Environment and ecology*"**

### **TEXT 3**

**1. Read the text «*Environment and ecology*»**

**Don't forget to work in the following way:**

- \* **Look through the text to know what it is about.**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary.**

**Environment and ecology**

The poisoning of the world's land, air, and water is the fastest-spreading disease of civilization. It probably produces fewer headlines than wars, earthquakes and floods, but it is potentially one of history's greatest dangers to human life on earth. If present trends continue for the next several decades, our planet will become uninhabitable.

Overpopulation, pollution and energy consumption have created such planet-wide problems as massive deforestation, ozone depletion, acid rains and the global warming that is believed to be caused by the greenhouse effect.

The seas are in danger. They are filled with poison: industrial and nuclear waste, chemical fertilizers and pesticides. The Mediterranean is already nearly dead; the North Sea is following. The Aral Sea is on the brink of extinction. If nothing is done about it, one day nothing will be able to live in the seas.

Every ten minutes one kind of animal, plant or insect dies out for ever. If nothing is done about it, one million species that are alive today will have become extinct twenty years from now.

Air pollution is a very serious problem. In Cairo just breathing the air is life threatening- equivalent to smoking two packs of cigarettes a day. The same holds true for Mexico City and 600 cities of the former Soviet Union.

Industrial enterprises emit tons of harmful substances. These emissions have disastrous consequences for our planet. They are the main reason for the greenhouse effect and acid rains.

An even greater environmental threat is nuclear power stations. We all know how tragic the consequences of the Chernobyl disaster are.

People are beginning to realize that environmental problems are not somebody else's. They join and support various international organizations and green parties. If governments wake up to what is happening - perhaps we'll be able to avoid the disaster that threatens the natural world and all of us with it.

### **Useful vocabulary**

**earthquake**

**flood**

**consumption**

**deforestation**

**depletion**  
**chemical fertilizers and pesticides**  
**The Mediterranean**  
**enterprise**  
**disaster**

**2. Find Russian equivalents in the text.**

1. The seas are in danger. 2. They are filled with poison: industrial and nuclear waste, chemical fertilizers and pesticides. 3. The Mediterranean is already nearly dead; the North Sea is following. 4. The Aral Sea is on the brink of extinction. 5. If nothing is done about it, one day nothing will be able to live in the seas.

**3. Ask your partner if he or she knows the answers to the following questions.**

1. What have created planet-wide problems?
2. What are seas filled with?
3. Why is air pollution a very serious problem?
4. What are the main reasons for the greenhouse effect and acid rains?
5. What is an even greater environmental threat?

**3. Insert prepositions where necessary.**

1. The seas are ... danger. 2. They are filled ... poison: industrial and nuclear waste, chemical fertilizers and pesticides. 3. The Aral Sea is ... the brink ... extinction. 4. If nothing is done ... it, one day nothing will be able to live ... the seas. 5. Every ten minutes one kind ... animal, plant or insect dies out ... ever. 6. If nothing is done ... it, one million species that are alive today will have become extinct twenty years ... now.

**4. Insert articles where necessary.**

1. ... seas are in danger. 2. ... Mediterranean is already nearly dead. 3. ... North Sea is following. ... 4. ... Aral Sea is on ... brink of extinction. 5. If nothing is done about it, one day nothing will be able to live in ... seas. 6. Air pollution is ... very serious problem. 6. In ... Cairo just breathing ... air is life threatening- equivalent to smoking two packs of cigarettes ... day. 7. ... same holds true for ... Mexico City and 600 cities of ... former Soviet Union.

**4. Give a summary of the text “*Environment and ecology*»**

**TEXT 4**

**1. Read “Dictionary.”**

**Environment - current issues:** emissions from coal-burning utilities and industries contribute to air pollution; acid rain, resulting from sulfur dioxide emissions, is damaging forests; pollution in the Baltic Sea from raw sewage and industrial effluents from rivers in eastern Germany; hazardous waste disposal; government established a mechanism for ending the use of nuclear power over the next 15 years; government working to meet EU commitment to identify nature preservation areas in line with the EU's Flora, Fauna, and Habitat directive.

**Definition:** This entry lists the most pressing and important environmental problems. The following terms and abbreviations are used throughout the entry:

**Acidification** - the lowering of soil and water pH due to acid precipitation and deposition usually through precipitation; this process disrupts ecosystem nutrient flows and may kill freshwater fish and plants dependent on more neutral or alkaline conditions (see acid rain).

**Acid rain** - characterized as containing harmful levels of sulfur dioxide or nitrogen oxide; acid rain is damaging and potentially deadly to the earth's fragile ecosystems; acidity is measured using the pH scale where 7 is neutral, values greater than 7 are considered alkaline, and values below 5.6 are considered acid precipitation; note - a pH of 2.4 (the acidity of vinegar) has been measured in rainfall in New England.

**Aerosol** - a collection of airborne particles dispersed in a gas, smoke, or fog.

**Afforestation** - converting a bare or agricultural space by planting trees and plants; reforestation involves replanting trees on areas that have been cut or destroyed by fire.

**Asbestos** - a naturally occurring soft fibrous mineral commonly used in fireproofing materials and considered to be highly carcinogenic in particulate form.

**Biodiversity** - also biological diversity; the relative number of species, diverse in form and function, at the genetic, organism, community, and ecosystem level; loss of biodiversity reduces an ecosystem's ability to recover from natural or man-induced disruption.

**Bio-indicators** - a plant or animal species whose presence, abundance, and health reveal the general condition of its habitat.

**Biomass** - the total weight or volume of living matter in a given area or volume.

**Carbon cycle** - the term used to describe the exchange of carbon (in various forms, e.g., as carbon dioxide) between the atmosphere, ocean, terrestrial biosphere, and geological deposits.

**Catchments** - assemblages used to capture and retain rainwater and runoff; an important water management technique in areas with limited freshwater resources, such as Gibraltar.

**DDT (dichloride-biphenyl-tricolor-ethane)** - a colorless, odorless insecticide that

has toxic effects on most animals; the use of DDT was banned in the US in 1972.

**Defoliants** - chemicals which cause plants to lose their leaves artificially; often used in agricultural practices for weed control, and may have detrimental impacts on human and ecosystem health.

**Deforestation** - the destruction of vast areas of forest (e.g., unsustainable forestry practices, agricultural and range land clearing, and the over exploitation of wood products for use as fuel) without planting new growth.

**Desertification** - the spread of desert-like conditions in arid or semi-arid areas, due to overgrazing, loss of agriculturally productive soils, or climate change.

**Dredging** - the practice of deepening an existing waterway; also, a technique used for collecting bottom-dwelling marine organisms (e.g., shellfish) or harvesting coral, often causing significant destruction of reef and ocean-floor ecosystems.

**Drift-net fishing** - done with a net, miles in extent, that is generally anchored to a boat and left to float with the tide; often results in an over harvesting and waste of large populations of non-commercial marine species (by-catch) by its effect of "sweeping the ocean clean."

**Ecosystems** - ecological units comprised of complex communities of organisms and their specific environments.

**Effluents** - waste materials, such as smoke, sewage, or industrial waste which are released into the environment, subsequently polluting it.

**Endangered species** - a species that is threatened with extinction either by direct hunting or habitat destruction.

**Freshwater** - water with very low soluble mineral content; sources include lakes, streams, rivers, glaciers, and underground aquifers.

**Greenhouse gas** - a gas that "traps" infrared radiation in the lower atmosphere causing surface warming; water vapor, carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, and ozone are the primary greenhouse gases in the Earth's atmosphere.

**Groundwater** - water sources found below the surface of the earth often in naturally occurring reservoirs in permeable rock strata; the source for wells and natural springs.

**Highlands Water Project** - a series of dams constructed jointly by Lesotho and South Africa to redirect Lesotho's abundant water supply into a rapidly growing area in South Africa; while it is the largest infrastructure project in southern Africa, it is also the most costly and controversial; objections to the project include claims that it forces people from their homes, submerges farmlands, and squanders economic resources.

**Inuit Circumpolar Conference (ICC)** - represents the 145,000 Inuits of Russia, Alaska, Canada, and Greenland in international environmental issues; a General

Assembly convenes every three years to determine the focus of the ICC; the most current concerns are long-range transport of pollutants, sustainable development, and climate change.

**Metallurgical plants** - industries which specialize in the science, technology, and processing of metals; these plants produce highly concentrated and toxic wastes which can contribute to pollution of ground water and air when not properly disposed.

**Noxious substances** - injurious, very harmful to living beings.

**Overgrazing** - the grazing of animals on plant material faster than it can naturally regrow leading to the permanent loss of plant cover, a common effect of too many animals grazing limited range land.

**Ozone shield** - a layer of the atmosphere composed of ozone gas (O<sub>3</sub>) that resides approximately 25 miles above the Earth's surface and absorbs solar ultraviolet radiation that can be harmful to living organisms.

**Poaching** - the illegal killing of animals or fish, a great concern with respect to endangered or threatened species.

**Pollution** - the contamination of a healthy environment by man-made waste.

**Potable water** - water that is drinkable, safe to be consumed.

**Salivation** - the process through which fresh (drinkable) water becomes salt (undrinkable) water; hence, desalination is the reverse process; also involves the accumulation of salts in topsoil caused by evaporation of excessive irrigation water, a process that can eventually render soil incapable of supporting crops.

**Siltation** - occurs when water channels and reservoirs become clotted with silt and mud, a side effect of deforestation and soil erosion.

**Slash-and-burn agriculture** - a rotating cultivation technique in which trees are cut down and burned in order to clear land for temporary agriculture; the land is used until its productivity declines at which point a new plot is selected and the process repeats; this practice is sustainable while population levels are low and time is permitted for regrowth of natural vegetation; conversely, where these conditions do not exist, the practice can have disastrous consequences for the environment .

**Soil degradation** - damage to the land's productive capacity because of poor agricultural practices such as the excessive use of pesticides or fertilizers, soil compaction from heavy equipment, or erosion of topsoil, eventually resulting in reduced ability to produce agricultural products.

**Soil erosion** - the removal of soil by the action of water or wind, compounded by poor agricultural practices, deforestation, overgrazing, and desertification.

**Ultraviolet (UV) radiation** - a portion of the electromagnetic energy emitted by the sun and naturally filtered in the upper atmosphere by the ozone layer; UV radi-

ation can be harmful to living organisms and has been linked to increasing rates of skin cancer in humans.

**Water-born diseases** - those in which bacteria survive in, and are transmitted through, water; always a serious threat in areas with an untreated water supply.

**Source:** CIA World Factbook - Unless otherwise noted, information in this page is accurate as of August 23, 2014

## TEXT 5

### 1. Read the text "*Ecological Problems*"

**Don't forget to work in the following way:**

- \* **Look through the text to know what it is about.**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary.**

## Ecological Problems

Since ancient times Nature has served Man, being the source of his life. For thousands of years people lived in harmony with environment and it seemed to them that natural riches were unlimited. But with the development of civilization man's interference in nature began to increase.

Large cities with thousands of smoky industrial enterprises appear all over the world today. The by-products of their activity pollute the air we breathe, the water we drink, the land we grow grain and vegetables on.

Every year world industry pollutes the atmosphere with about 1000 million tons of dust and other harmful substances. Many cities suffer from smog. Vast forests are cut and burn in fire. Their disappearance upsets the oxygen balance. As a result some rare species of animals, birds, fish and plants disappear forever, a number of rivers and lakes dry up.

The pollution of air and the world's ocean, destruction of the ozone layer is the result of man's careless interaction with nature, a sign of the ecological crises.

The most horrible ecological disaster befell Ukraine and its people after the Chernobyl tragedy in April 1986. About 18 percent of the territory of Belarus was also polluted with radioactive substances. A great damage has been done to the agriculture, forests and people's health. The consequences of this explosion at the atomic power-station are tragic for the Ukrainian, Byelorussian and other nations.

Environmental protection is of a universal concern. That is why serious measures to create a system of ecological security should be taken.

Some progress has been already made in this direction. As many as 159 countries — members of the UNO — have set up environmental protection agencies. Numerous conferences have been held by these agencies to discuss problems facing ecologically poor regions including the Aral Sea, the South Urals, Kasbahs, Donbass, Semipalatinsk and Chernobyl.

An international environmental research centre has been set up on Lake Baikal. The international organisation Greenpeace is also doing much to preserve the environment.

But these are only the initial steps and they must be carried onward to protect nature, to save life on the planet not only for the sake of the present but also for the future generations.

### Useful vocabulary

- ancient** — древний
- harmony** — гармония
- environment** — окружающая среда
- riches** — богатства
- unlimited** — неограниченный
- to interfere** — вмешиваться
- to increase** — увеличиваться, возрастать
- smoky** — дымный
- enterprises** — предприятия
- by-product** — побочный продукт
- activity** — деятельность
- to pollute** — загрязнять
- substances** — вещества
- oxygen** — кислород
- rare** — редкий
- destruction** — разрушение
- ozone** — озон
- layer** — слой
- interaction** — взаимодействие
- horrible** — ужасный
- disaster** — катастрофа
- to befall** — пасть (на что-то)

**2. Ask your partner if he or she knows the answers to the following questions.**

1. How did people live for thousands of years?
2. What cities appear all over the world today?
3. What pollutes the air we breathe?
4. What is the result of the pollution the atmosphere?
5. Why is environmental protection of a universal concern?
6. What are the initial steps in this direction?

**3. Insert prepositions where necessary.**

1. The most horrible ecological disaster befell Ukraine and its people ... the Chernobyl tragedy ... April 1986. 2. ... 18 per cent ... the territory ... Belarus was also polluted ... radioactive substances. 3. A great damage has been done ... the agriculture, forests and people's health. 4. The consequences ... this explosion ... the atomic power-station are tragic ... the Ukrainian, Byelorussian and other nations.

**4. Insert articles where necessary.**

1. Their disappearance upsets ... oxygen balance. 2. As ... result some rare species of ... animals ... birds ... fish and ... plants disappear forever ... number of rivers and lakes dry up. 2. ... pollution of air and ... world's ocean, destruction of ... ozone layer is ... result of man's careless interaction with nature, a sign of ... ecological crises.

**5. Make up ten questions based on the text and answer them.**

**6. Give a summary of the text “*Ecological Problems*”**

**TEXT 6**

**Read the text “JOE PICKETT, AN AMERICAN PEACE CORPS VOLUNTEER, TALKS ABOUT ENVIRONMENTALISM IN THE US”**

**Don't forget to work in the following way:**

- \* **Look through the text to know what it is about.**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary.**

**JOE PICKETT, AN AMERICAN PEACE CORPS VOLUNTEER, TALKS ABOUT ENVIRONMENTALISM IN THE US**

**Read the text and tick the things he mentions:**

- 1) recycling
- 2) using ecological detergents
- 3) trying to use your car as little as possible
- 4) ozone problem & greenhouse effect
- 5) saving natural resources
- 6) contradictions between businesses and environmentalists
- 7) becoming a vegetarian
- 8) using lead-free petrol
- 9) protecting national and state monuments
- 10) environmental laws

In early American history, there was little regard for the environment. During the agricultural period of our history, land was cleared of trees for farming. This continued with the industrialization of America. During the war years the US became a world economic and political power, people thought they could take control over the nature, its elements, and there seemed to have been no environmental problems to worry about.

But with peace signing and technology improving, environmentalism is a strong movement today. Take the automobile industry. American cars 30 years ago were big, heavy, oil-burning, gas hogs. They used leaded gasoline. Power and size were the important things with cars of this era. But in the mid 70s, there was an oil crisis in America and people became concerned with saving fuel. American cars began using unleaded gasoline, which is less polluting. People started buying smaller Japanese cars. Thus began major changes in American car industry. They began designing smaller, more efficient cars. Big, wasteful 8 cylinder engines were replaced with 4 and 6 cylinder engines. Cars got smaller and lighter. Mileage increased. Carburetors were replaced with fuel injection. Alternatives to gas engines were looked at - alcohol, solar, electric. Federal standards were passed for cars: the mileage per gallon for each company's cars must meet a certain average. California legislated that 2% of cars must be emission-electric by 1998. This has been replaced because of limits in battery technology. But cars in America today are lighter, smaller, and more efficient than 20 years ago.

Environmentalism has continued in other areas. Crops are rotated to conserve soil. Companies plant trees when they cut old ones down. Recycling has become very popular. Most major cities have recycling centers for plastics and paper. Some cities require you to recycle. Sometimes they go to such lengths that it's more wasteful to recycle than just throw it away. Many companies advertise their products as "Not harmful to the environment", or "Made with recycled fibers".

The federal government has been involved in the environment for most of the 20<sup>th</sup> century. President Teddy Roosevelt was a strong environmentalist and he proclaimed the first national monument in 1906 - Devil's Tower in Wyoming, then the first national park - Yellowstone, also in Wyoming. These places are protected by and funded by the government. Development within the parks is limited and hunting isn't allowed. There many national parks around America, as well as state parks which are managed by and protected by the states.

There is always a struggle between businesses and environmentalists. Businesses want to develop and use resources at minimal cost, and environmentalists want to protect them. The government has set standards for smokestack emissions which businesses complain about. They must install expensive cleaners in their factories.

Recently a company wanted to build a gold mine near Yellowstone but it was stopped by the government.

Last fall during the presidential election, Clinton proclaimed a huge section of southern Utah a national monument. It is as large as Delaware and Rhode Island combined. He did this by decree using the 1906 Antiquities Act. This allows presidents to declare historical and national monuments. But this was before laws developed to give people and Congress a say. Many people feel Clinton overstepped his authority and did this for his re-election campaign. People in Utah are furious. This region has huge deposits of oil and coal which could mean jobs and billions of dollars for Utah.

A lot is said in America about the ozone problem and greenhouse effect. Companies design products that won't harm the ozone layer. Cars use better fuels to not increase greenhouse effect. For example, you used to be able to buy cans of Freon to replenish your car's air conditioner. Now you must go to a certified mechanic to have it done. After this year, all new air conditioners in cars must use another chemical that doesn't harm ozone. Anyone who wants to replenish old air conditioners must have it converted to the new-expensive.

Generally, environmentalism is a good trend. Sometimes they go too far. But mostly it protects the environment and keeps businesses from abusing it. It also makes companies design better products. American cars are much lighter, fuel

efficient and less harmful to the environment than ever, largely due to the environmental laws.

### Useful vocabulary

**regard for**

**mileage**

**a certain average**

**crops**

**advertise**

**to conserve**

**to recycle**

**overstepped**

**to replenish**

#### **2. Ask your partner if he or she knows the answers to the following questions.**

1. When did the US become a world economic and political power?
2. What is a strong movement today?
3. What was with the American automobile industry in 30 years ago and in the mid-70s in?
4. Where has the federal government been involved in for most of the 20<sup>th</sup> century?
5. What is there always a struggle between?
6. What did Clinton proclaim?
7. What is said in America about the ozone problem and greenhouse effect?
8. Why is environmentalism a good trend?

#### **3. Insert prepositions where necessary.**

1. But ... peace signing and technology improving, environmentalism is a strong movement today. 2. Power and size were the important things ... cars ... this era. 3. But ... the mid-70s, there was an oil crisis ... America and people became concerned ... saving fuel. 4. Thus began major changes ... American car industry. 5. Carburetors were replaced ... fuel injection. 6. Alternatives to gas engines were looked ... - alcohol, solar, electric. 7. Federal standards were passed ... cars: the mileage per gallon ... each company's cars must meet a certain average

#### **4. Insert articles where necessary.**

1. Last fall during ... presidential election, Clinton proclaimed ... huge section of southern Utah ... national monument. 2. It is as large as Delaware and Rhode Island combined. He did this by decree using ... 1906 Antiquities Act. 3. But this was before laws developed to give people and Congress ... say. 4. This region has huge

deposits of... oil and ...coal which could mean... jobs and ...billions of ...dollars for Utah.

**5. Make up ten questions based on the text and answer them.**

**6. Give a summary of the text “*Ecological Problems*”**

**Write about “ABOUT ENVIRONMENTALISM IN THE US”**

**For 10 minutes. Show your partner your paper. Correct each other’s work**

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### **TEXT 7**

**1. Read the text “LITTER”**

**Don’t forget to work in the following way:**

- \* Look through the text to know what it is about.**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary.**

### **LITTER**

**Do you agree that litter is a problem in our cities?**

**Do you ever throw litter on the ground?**

Litter is garbage - like food, paper, and cans - on the ground or in the street. Where many people live together, litter is a problem. People don’t always put their garbage in the garbage can. It’s easier to drop a paper than to find a garbage can for it. But litter is ugly. It makes the city look dirty, and it spoils the view.

The wind blows papers far away. Often they are difficult to catch. When they blow against a fence, they stay there. This fence is a wall of garbage.

Litter is a health problem, too. Food and garbage bring animals, which sometimes carry disease.

Some people want to control litter. They never throw litter themselves, and sometimes they work together in groups to clean up the city. In most places in

America litter is against the law. The law punishes people who throw garbage on the streets. They usually pay a fine, and occasionally they go to jail.

Two famous sayings in the United States are: “Don’t be a litter bug!” and “Every litter bit hurts!”

**A. Match the words on the left with the definitions on the right. Then make complete sentence definitions:**

- |                |   |
|----------------|---|
| 1) litter      | a) garbage on the ground or in the street |
| 2) fence       | b) a special can for garbage              |
| 3) jai         | c) everything that a person can see       |
| 4) garbage can | d) a wall that separates two places       |
| 5) view        | e) sickness                               |
| 6) fine        | f) to manage or to stop                   |
| 7) litterbug   | g) a number of people                     |
| 8) disease     | h) money people pay as punishment         |
| 9) control     | i) a place people stay as punishment      |
| 10) group      | j) a person who throws litter             |

**2. Ask your partner if he or she knows the answers to the following questions.**

1. Do you think people always must throw garbage in the garbage can? Why?
2. Do you usually or sometimes help to clean up the litter?
3. Do you think litter always spoils the view?
4. Do you think litterbugs must be punished? How?
5. Why is litter a health problem?
6. Do you agree that litter is a problem in our cities?
7. Do you ever throw litter on the ground?

**3. Make up ten questions based on the text and answer them.**

#### 4. Give a summary of the text “*LITTER*”.

### TEXT 8

#### 1. Read the text “*About environmental problems*”

Don't forget to work in the following way:

- \* Look through the text to know what it is about.
- \* Read the whole text and try to understand it.
- \* Read sentence by sentence, trying to guess the meaning of new words.
- \* Look up the words you do not know in a dictionary.

#### About environmental problems

Forests – Boreal forests, coniferous forests, temperate-zone forests, and tropical rain forests – cover 30% of the earth's land surface.

The tropical rain forests in Amazonia, Southeast Asia, and West/Central Africa are being destroyed at an alarming rate of 42 million acres per year. This destruction is caused by slash-and-burn agriculture, cattle ranching, the building of dams and highways, and mining.

The tropical rain forest is a natural recycler, provider and protector for our planet. It recycles carbon, nitrogen, and oxygen, helps determine temperature, rainfall, and other climatic conditions, and supports the most diverse ecosystem in the world.

Deforestation is endangering this ecosystem, and could cause at least one-fourth of all species on earth to vanish in the next 25 years. Burning these forests releases carbon and decreases the oxygen in the atmosphere, causing the possible acceleration of global warming. The loss of rain forests also means the loss of many indigenous peoples who inhabit those areas. Some, like the Malaysian Iban and Penan tribes, are fighting for some of the oldest rain forests in the world, which have been their homes for centuries.

Protecting all the forests is one key to our survival on this planet. President Houphouet – Boigny of Cote d'Ivoire, whose country has lost 90% of its original forests and woodlands, has said:

*“Man has gone to the moon but he does not know yet how to make a flame tree or a birdsong. Let us keep our dear countries free from irreversible mistakes which would lead us in the future to long for those same birds and trees.”*

## Useful vocabulary

### 2. Find Russian equivalents in the text.

1. Deforestation is endangering this ecosystem, and could cause at least one-fourth of all species on earth to vanish in the next 25 years. 2. Burning these forests releases carbon and decreases the oxygen in the atmosphere, causing the possible acceleration of global warming. 3. The loss of rain forests also means the loss of many indigenous peoples who inhabit those areas.

### 3. Ask your partner if he or she knows the answers to the following questions.

1. What is deforestation?
2. What is it caused by?
3. Why forest is called a natural recycler, provider and protector for our planet?
4. What can happen to the ecosystem in the next 25 years if people don't stop the destruction of forests?
5. How can people protect the forests?

### 4. Make up ten questions based on the text and answer them.

### 5. Give a summary of the text "*About environmental problems*"

## TEXT 9

### 1. Read the text "*Solutions to some environmental problems*"

Don't forget to work in the following way:

- \* Look through the text to know what it is about.
- \* Read the whole text and try to understand it.
- \* Read sentence by sentence, trying to guess the meaning of new words.
- \* Look up the words you do not know in a dictionary.

## Solutions to some environmental problems

"In the time it takes to read this, more than a million pounds of materials that could have been recycled will be thrown away all over California." – Californians Against Waste (CAW) Newsletter

We are running out of space in which to discard our garbage, and our current methods of disposing of it are endangering the environment. One solution to this problem is recycling.

Recycling is the process of collecting used materials and remanufacturing them into new products instead of throwing them away. This process is important because it reduces the trash in overcrowded landfills, salvages materials that we can use to make new products, and saves our natural resources.

Used products may be converted or reutilized in a number of ways. Paper is reprocessed into new sheets, glass is cleaned and remolded, and plastic is melted and formed into new products such as carpet backing, fence posts, and drainage pipes.

Recycling is being done worldwide. Japan recycles 95% of its bottles and 50% of its aluminum; the United States recycles only 25% of its bottles and 38% of its aluminum. In Germany a new law requires manufacturers to create ways of reusing their packaging material.

Helping to solve the garbage crisis is something everyone can do if they just remember the three Rs: “reduce, reuse, and recycle.”

### **Useful vocabulary**

**to discard**

**garbage**

**endangering the environment**

**solution**

**current**

**recycling**

**overcrowded landfills**

**salvages materials**

**remolde**

**carpet backing**

**fence posts**

**drainage pipes.**

### **2. Ask your partner if he or she knows the answers to the following questions.**

1. How can each of us contribute to keeping the environment cleaner and healthier?
2. What does Recycling mean?
3. What three Rs can we remember?

### **3. Insert prepositions where necessary.**

1. Recycling is the process ... collecting used materials and remanufacturing them ... new products ... throwing them away.
2. This process is important ... it reduc-

es the trash ... overcrowded landfills, salvages materials that we can use to make new products, and saves our natural resources. 3. Used products may be converted or reutilized ... a number of ways. 4. Paper is reprocessed ... new sheets, glass is cleaned and remolded, and plastic is melted and formed ... new products such as carpet backing, fence posts, and drainage pipes.

**4. Make up ten questions based on the text and answer them.**

**5. Give a summary of the text “*Solutions to some environmental problems*”**

## TEXT 10

**1. Read the text “*The difference between endangered and threatened species*”**

**Don't forget to work in the following way:**

**\* Look through the text to know what it is about**

**\* Read the whole text and try to understand it.**

**\* Read sentence by sentence, trying to guess the meaning of new words.**

**\* Look up the words you do not know in a dictionary**

### **The difference between endangered and threatened species**

When a plant or animal is gone forever, we say it is extinct. Although it is a natural process, in today's world it is happening at an alarming rate. Some experts estimate that one species – plant, animal, or insect – becomes extinct every day. At that rate, within the next 20 years one-fifth of all species could be extinct.

To prevent wildlife in the United States from becoming extinct, Congress passed the Endangered Species Act in 1973. This law established two categories for species in trouble: *endangered* and *threatened*. A species is listed as endangered when there are so few members of the species left that it is on the brink of extinction. A species is threatened when, if not protected, it is likely to become endangered.

The African elephant is one of approximately 1,117 species on the endangered species list, and there more than 4,000 waiting to be put on the list. Sadly, some may become extinct while waiting to be listed.

The African elephant is the largest land mammal on the earth. In the 1970s African elephants numbered in the millions; today there are only about 609,000. This decline has been brought about by loss of habitat (through encroachment by people), drought, and the ivory trade.

To reduce elephant poaching and collapse the market for ivory, in 1989 the Convention on International Trade in Endangered Species (CITES) banned the ivo-

ry trade. However, poaching continues. “What is the solution? On the road from Makuti to Kariba, far from the preserves, in the Zambezi valley, vast stretches of savanna bear the scars left by giants. Will they be left to proliferate, even if ivory loses its value?” – Corinne Denis, L’Express, 27 October 1989.

### Useful vocabulary

**to estimate**

**to prevent wildlife**

**approximately**

**elephant poaching and collapse**

#### **2. Find Russian equivalents in the text.**

1. To reduce elephant poaching and collapse the market for ivory, in 1989 the Convention on International Trade in Endangered Species (CITES) banned the ivory trade. 2. However, poaching continues. “What is the solution? 3. On the road from Makuti to Kariba, far from the preserves, in the Zambezi valley, vast stretches of savanna bear the scars left by giants. 4. Will they be left to proliferate, even if ivory loses its value?” – Corinne Denis, L’Express, 27 October 1989.

#### **3. Insert prepositions where necessary.**

1. To prevent wildlife ... the United States ... becoming extinct, Congress passed the Endangered Species Act ... 1973. 2. This law established two categories ... species ... trouble: *endangered* and *threatened*. 3. A species is listed as endangered when there are so few members ... the species left that it is ... the brink ... extinction. 4. A species is threatened when, if not protected, it is likely to become endangered.

#### **4. Insert articles where necessary.**

1. ... African elephant is ... largest land mammal on ... earth. 2. In ... 1970s African elephants numbered in ... millions; today there are only about 609,000. 3. This decline has been brought about by loss of habitat (through encroachment by people), drought, and ... ivory trade

#### **5. Make up ten questions based on the text and answer them.**

**6. Give a summary of the text « *The difference between endangered and threatened species* »**

### TEXT 11

#### **1. Read the text “*Acid rain*”**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

**1. What information is offered in this text? Think of an appropriate headline to the text**

### **Acid rain**

“The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers and sea with dangerous and even lethal chemicals.”  
– Rachel Carson, *Silent Spring*.

Air pollution is the result of man's use of lethal chemicals, and is a common hazard in both industrial and developing countries. One form of air pollution is acid rain.

Acid rain results from the release into the atmosphere of sulfur oxide and nitrogen oxide. Electrical generating plants, industrial boilers, large smelters, and automobiles are among the chief source of these emissions. The gases react with water droplets, forming a diluted mixture of sulfuric acid and nitric acid, and it is this mixture that returns to earth in the form of acid rain, mist, or snow. Pushed by wind currents, the acid rain often falls to the ground far from its point of origin.

Acid rain is killing vast stretches of forest in Canada, the United States, and central and northern Europe. In Europe nearly every species of tree is affected. Symptoms include thinning of leaves and needles, deformed growth, and, in some cases, death. Acid rain has acidified lakes and streams, rendering them unable to support fish, wildlife, plants, or insects. In Sweden at least 40,000 of the 90,000 lakes have been affected, and in the United States one in five lakes suffers from this type of pollution.

### **Useful vocabulary**

**contamination**

**lethal chemicals**

**hazard**

**acid rain**

**a diluted mixture**

**species of tree**

**rendering**

## **2. Find Russian equivalents in the text.**

1. “The most alarming of all man’s assaults upon the environment is the contamination of air, earth, rivers and sea with dangerous and even lethal chemicals.” – Rachel Carson, *Silent Spring*. 2. Air pollution is the result of man’s use of lethal chemicals, and is a common hazard in both industrial and developing countries. 3. One form of air pollution is acid rain.

## **3. Insert prepositions where necessary.**

1. Acid rain results from the release into the atmosphere of sulfur oxide and nitrogen oxide. Electrical generating plants, industrial boilers, large smelters, and automobiles are among the chief source of these emissions. The gases react with water droplets, forming a diluted mixture of sulfuric acid and nitric acid, and it is this mixture that returns to earth in the form of acid rain, mist, or snow. Pushed by wind currents, the acid rain often falls to the ground far from its point of origin.

## **4. Ask your partner if he or she knows the answers to the following questions.**

1. What information is offered in this text? Think of an appropriate headline to the text

## **5. Give a summary of the text**

### **TEXT 12**

#### **1. Read the text.**

**Don’t forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

#### **1. Read the text and outline its main idea**

### **UV rays**

High above the earth’s atmosphere there is a thin veil in the stratosphere called the ozone layer, which protects the earth from the sun’s destructive ultraviolet (UV) rays.

This protective layer is being damaged by chemicals known as chlorofluorocarbons (CFCs), which are released into the atmosphere by the daily use of such industrial and household products as refrigerators, air conditioners, foam insulation, cleaning chemicals, and food packaging. The CFCs rise into the ozone layer, where the sunlight decomposes them, releasing chlorine. The chlorine attacks the ozone molecules, thinning or even making a ‘hole’ in the ozone layer. This ‘hole’ allows more UV rays to penetrate to the earth.

Overexposure to UV rays can increase the risk of skin cancer, weaken the immune system, and damage the retina. It is estimated that in the United States alone one in six Americans will develop skin cancer as a result of overexposure to UV rays.

Not only are humans at risk; so, too, are animals, plants, and the environment in general. With the thinning of the ozone layer, UV rays can penetrate the oceans, seriously impairing the growth of plankton, an essential part of the marine life food chain, and can reduce the yields of economically important crops such as soybeans, cotton, and rice.

### **Useful vocabulary**

**ozone layer**

**protective layer**

**to damage**

**overexposure**

**skin cancer**

**to estimate**

**to penetrate**

### **2. Find Russian equivalents in the text.**

1. The CFCs rise into the ozone layer, where the sunlight decomposes them, releasing chlorine. 2. Overexposure to UV rays can increase the risk of skin cancer, weaken the immune system, and damage the retina. 3.. It is estimated that in the United States alone one in six Americans will develop skin cancer as a result of overexposure to UV rays.

### **3. Make up 5 questions based on the text and answer them.**

### **4. Give a summary of the text “*UV rays*”**

## TEXT 13

### 1. Read the text. Don't forget to work in the following way:

- \* Look through the text to know what it is about
- \* Read the whole text and try to understand it.
- \* Read sentence by sentence, trying to guess the meaning of new words.
- \* Look up the words you do not know in a dictionary

### Read the text and say what alarming trends take place in the life of the ocean

#### Alarming trends

Oceans cover more than 70% of the earth's surface. Despite the vastness of this area, we know little about it. The oceans are just as diverse as the land. They are interwoven with history, although man has looked upon them as barriers and alien spaces.

Life began in the ocean. More than 3<sup>1</sup>/<sub>2</sub> billion years ago there evolved simple single-celled organisms. Today the oceans support the wealth of simple and complex sea life, from phytoplankton (drifting plants) to crustaceans (shrimp, crabs) to marine mammals (whales, dolphins). But through ignorance and misunderstanding we are placing these resources in jeopardy. There is widespread pollution and disruption of our coastal waters, whales and dolphins are hunted to near extinction. And many fishing areas are being depleted.

The oceans do not belong to a single nation, but are free, open territory to be enjoyed and shared. However, too often nations are overly aggressive in taking the resources the oceans have to offer. A tragic result has been the systematic hunting of whales from one species to another for whalebone, blubber, and oil. In 1985 whales were given a reprieve when the International Whaling Commission imposed a moratorium on killing whales.

Unfortunately, some harvesting of whales continues. Also, the tuna industry has put the dolphin population at risk and onto the endangered species list. In the past 30 years the tuna-fishing industry has killed more than 6 million dolphins. In the United States steps have been taken to protect the dolphins with the Dolphin Protection Consumer Information Act of 1970, a ban on all drift-net catching of tuna beginning in July 1991 and on the importation of all drift-net-caught fish products beginning in July 1992.

## Useful vocabulary

**diverse**

**interwoven**

**jeopardy**

**to deplete**

**blubber**

**to impose**

### **2. Find Russian equivalents in the text.**

1. Life began in the ocean. More than 3<sup>1</sup>/<sub>2</sub> billion years ago there evolved simple single-celled organisms. 2. Today the oceans support the wealth of simple and complex sea life, from phytoplankton (drifting plants) to crustaceans (shrimp, crabs) to marine mammals (whales, dolphins). 3. But through ignorance and misunderstanding we are placing these resources in jeopardy. 4. There is widespread pollution and disruption of our coastal waters, whales and dolphins are hunted to near extinction. 5. And many fishing areas are being depleted.

### **3. Insert prepositions where necessary.**

1. Oceans cover more than 70% ... the earth's surface. 2. Despite the vastness ... this area, we know little ... it. 3. They are interwoven ... history, although man has looked ... them as barriers and alien spaces. 4. A tragic result has been the systematic hunting ... whales ... one species to another ... whalebone, blubber, and oil.

### **4. Insert articles where necessary.**

1. Also ... tuna industry has put ... dolphin population at risk and onto ... endangered species list. 2. In ... past 30 years ... tuna-fishing industry has killed more than 6 million dolphins. 3. In ... United States steps have been taken to protect ... dolphins with ... Dolphin Protection Consumer Information Act of 1970, a ban on all drift-net catching of tuna beginning in July 1991 and on ... importation of all drift-net-caught fish products beginning in July 1992.

### **5. Make up ten questions based on the text and answer them.**

### **6. Give a summary of the text “Alarming trends”.**

## TEXT 14

### **1. Read the text:” *Respect the Land*”**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**

- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary**

## **Respect the Land**

By treating our planet as a community, we can save our natural riches for future generations

By Al Gore

When we consider a subject as sweeping as the environment, we often focus on its most tangible aspects - the air we breathe, the water we drink, the food we put on the table. Those things are critically important. But to me the environment is also about something less tangible, though no less important. It is about our sense of community - the obligation we have to each other, and to future generations, to safeguard God's earth. It is about our sense of responsibility, and the realization that natural beauty and resources that took millions of years to develop could be damaged and depleted in a matter of decades.

Those are values I learned firsthand, as a young boy on my family's farm in Carthage, Tennessee. We didn't call it environmentalism back then; it was simply common sense. My earliest environmental lessons came from our efforts to prevent soil erosion - by stopping the formation of gullies that would wash away the vital topsoil on which our farm depended. For a time, some large farmers who leased their land for short-term profits didn't worry about the soil erosion; that's one of the reasons more than three hectares of prime topsoil past Memphis every hour, washed away for good.

As a teenager, I learned that such short-term thinking was causing even more serious problems. One of the books that we discussed around our family table was Rachel Carson's classic *Silent Spring*, about pesticide abuse. As it did for millions around the world, Carson's book helped awaken in my understanding that our planet's life is too precious to squander.

Today, the threats to our environment are even clearer to see - and much greater in scope and number. We live in a world where climate change, deforestation, holes in the ozone layer and air pollution are growing sources of concern. Our challenge is to find new ways to address those problems by reaching back to our oldest values of community and responsibility - by inspiring a greater respect for the land and the resources we share - even as economies and societies advance and develop around the world.

Fortunately, as I have raised a family of my own, I have learned that we have millions of powerful allies in this cause: our children. It is often children who remind their parents to recycle their cans, or to bundle their newspapers. It is often

children who remind their parents of the simple miracles of nature - the crops that come from our farms, the parks and lakes and campsites where families and communities gather.

If we are to protect and preserve our environment on a global scale, we all must do our part, as nations, as families and as individuals. The need for awareness has never been greater, and the opportunity for us to make a difference is just as great. If we practice and teach the right kind of care and commitment for our environment, it will continue not only to bring us its natural gifts, but also to bring us together.

Respect the Land

**Find in the text the English equivalents for the following:**

- Широкомасштабный;
- осязаемый, очевидный;
- охранять;
- истощать;
- ценности;
- знать по собственному опыту;
- политика защиты окружающей среды;
- здравый смысл;
- угрозы;
- достойная задача;
- вызвать (уважение);
- сыграть свою роль;
- чрезмерное употребление пестицидов;
- могущественные союзники;
- потребность осознать.

Do you know who Al Gore is?

It might be interesting for you to know that the US Vice President is author of *Earth in the Balance*.

**Answer the questions:**

1. What is environmentalism to Al Gore?
2. What does he mean by 'sense of community'?
3. Where did his earliest environmental lessons come from?
4. What book influenced him as a teenager? What books on environmental issues have you read? Did they impress you?
5. What *powerful allies* are the author talking of?

**LISTENING (3)**

**A. Pre-listening task**

Talk to another student. What do you know about these places?

The Himalayas

Bangladesh

The Sudan

The Amazon jungle

**B. You are going to hear an interview with David Attenborough. Here is the introduction**

'David Attenborough knows the world better than most people. He's spent much of the last seven years globe-trotting for his successful television programmes *Life on Earth* and *the Living Planet*. But his next series might be named *The End of Life on the Dying Planet*. Attenborough is very gloomy about much of what he's seen'. What do you think is happening in these places that makes him 'gloomy'?

**C. Listening for gist**

Listen to the interview. What is making David Attenborough gloomy about each place. Is there a common cause?

**Comprehension check**

1. Why are forests cut down in the Himalayas?
2. 'The trees were umbrellas'. What does this mean?
3. What happens to the soil without trees?
4. How are the floods caused in Bangladesh?
5. What is the 'devastating statistics' about the desert in the Sudan?
6. Why does David Attenborough call it a 'heart-breaking' statistics?

7. Why did he not believe at first that the Amazon jungle could disappear?
8. How are the statistics about the disappearing jungle made?
9. How much jungle is being destroyed every year?
10. Why are the plants in tropical forests important to us?

**D. What do you think?**

1. David Attenborough's last words in the interview are 'They are coming our way'. What do you understand by this?
2. What are some of the future possibilities that David Attenborough is afraid of?

Example

*There might be no more tropical plants .*

### **MY NEIGHBORHOOD, MY ENVIRONMENT**

**Task:** Take a walking tour of the University (school, lyceum, etc.) environment. Each student in a group will be responsible for recording information about one type of place in the neighborhood: *work places, living spaces, recreation spaces, wildlife spaces.*

**Answer the following questions:**

1. What things make some living spaces more attractive?
2. How could living spaces in the neighborhood be improved?
3. How do work spaces improve the neighborhood?
4. What negative effects do they have?
5. How could work spaces in the neighborhood be improved?
6. Are there enough spaces for wildlife?
7. How can we help wild animals survive in the neighborhood?
8. Are there enough recreation spaces in the neighborhood?
9. If not, what can we do to create more?
10. What can you do to improve the neighborhood environment?

**Discuss these questions in your groups first, then conduct a whole-class discussion of the questions.**

**WORKSHEET**

What's in the Neighborhood	Litter-free	Plants or Trees	Garbage Cans	Lots of Traffic	Other Comments
Work places					
Living spaces					
Recreation spaces					
Wild spaces					

**WRITING**

**Write a paragraph about what you do or what you think you will do in the future to help the environment.**

**Write about these things:**

- ways of transport,
- shopping,
- food,
- garbage.

If you have not changed your habits in any way, say why not.

**TEXT 15**

**1. Read the text “*The Problem of Environmental Protection in Great Britain*”**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

### **The Problem of Environmental Protection in Great Britain**

Environmental protection is an international issue of great importance and Great Britain pays much attention to it. There are nearly 500 000 protected buildings and 7000 conservation areas of architecture of historical interest in Britain. The Government supports the work of the voluntary sector in preserving the national heritage.

Total emissions of smoke in the air have fallen by 85 per cent since 1960. Most petrol stations in Britain stock unleaded petrol. The Government is committed to the control of gases emission, which damages the ozone layer.

They also contribute to the greenhouse effect, which leads to global warming and a rise in sea levels. Britain stresses the need for studying the science of climate change.

Green belts are areas where land should be left open and free from urban sprawl. The Government attaches great importance to their protection. National parks cover 9 per cent of the total land area of England and Wales. The National Rivers Authority protects island waters in England and Wales.

In Scotland the River purification authorities are responsible for water pollution control. Great Britain takes care of it's environment for themselves and extgenerations.

### **Useful vocabulary**

**voluntary** — добровольный

**petrol** — бензин

**emission** — выброс

**layer** — слой

### **2. Answer the following questions on the text:**

1. What is an international issue of great importance?
2. What are green belts?
3. Who is responsible for water pollution control in Scotland?

4. What is the total emission of smoke in the air?
5. Is it easy to buy unleaded petrol in Britain?

**3. Find Russian equivalents in the text.**

1. Total emissions of smoke in the air have fallen by 85 per cent since 1960. 2. Most petrol stations in Britain stock unleaded petrol. 3. The Government is committed to the control of gases emission, which damages the ozone layer.

**4. Say if these statements are true or false.**

1. Total emissions of smoke in the air have fallen by 65 per cent since 1960.
2. The Government is committed to the control of gases emission, which damages the ozone layer.
3. Britain stresses the need for studying the science of climate change.

**5. Insert prepositions where necessary.**

1. Total emissions ... smoke ... the air have fallen ... 85 per cent ... 1960. 2. Most petrol stations ... Britain stock unleaded petrol. 3. The Government is committed to the control ... gases emission, which damages the ozone layer. 4. National parks cover 9 per cent ... the total land area ... England and Wales.

**6. Give a summary of the text “*The Problem of Environmental Protection in Great Britain*”**

**TEXT 16**

**1. Read the text “*The environment friendly consumer*”**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about
- \* Read the whole text and try to understand it.
- \* Read sentence by sentence, trying to guess the meaning of new words.
- \* Look up the words you do not know in a dictionary

**2. Reading comprehension**

**1). Read the article called “*The environment friendly consumer*”.**

**Make a list of the publications mentioned in the text.**

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_

- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_

## 2).Vocabulary.

**Find the words in the text which correspond to the definitions**

1. \_\_\_\_\_. A word which describes people who take part in something or are affected by it.(adj.)
2. \_\_\_\_\_. People who buy things or use services.(n)
3. \_\_\_\_\_. The moment when something is made available to the public.(n)
4. \_\_\_\_\_. Shops.(n)
5. \_\_\_\_\_. Official advice about how to do something.(n)
6. \_\_\_\_\_. A mark which is difficult or impossible to remove.(n)
7. \_\_\_\_\_. Keep something warm by covering it or surrounding it in a thick layer.(vb.)
8. \_\_\_\_\_. To refuse to be involved with something which you strongly disapprove of.(vb.)

### **The environment friendly consumer**

The concerned environmentalist is not short of support when it comes to compiling an acceptable shopping list. In march Friends of the Earth published their *Good Wood Guide*, telling consumers how to avoid depleting the tropical rain forests. They have had at least 70,000 inquiries for their list of non-CFC (chlorofluorocarbon) aerosols. The Vegan Society has sold 4,000 copies of its *Cruelty-Free Shopper* since its launch in January, a pocket-sized handbook detailing an astonishing number of stores and suppliers of products that neither contain animal products nor have been tested on animals – everything from dog food to detergent. In September John Ellington, publisher of the Green Pages, a directory of opportunities in the multy-million-pound environmental business, hopes to produce *The Green Consumer Guide* which will detail the best buys in food, DIY, cars and holidays. *The Vegan*, the Vegan Society's magazine, al-

ready advertises vegan holidays as well as a vegan introductory service. Chris Guttins of Friends of the Earth is the author of a leaflet out next month called *Daily Life and the Environment*. “The basic rule is to use products from sources that can be regrown or revitalized,” he says. These are his guidelines:

**Cleaning:** avoid chemicals as much as possible, use ‘ecological’ detergents and natural substances for stain removal. Do not over-clean.

**Clothes:** natural fibers like cotton and wool.

**Cosmetics and body products:** no aerosols, only natural substances tested without animal experiments.

**Energy:** use less; insulate homes, put on extra clothing.

**Food:** fresh, vegetarian, organic, British grown.

**Fuel:** gas is preferable to nuclear-powered electricity, wood and coal to gas.

**Furniture:** no tropical hardwoods.

**Packaging:** boycott excessive multi-wrappings. Take a basket instead of getting a plastic bag.

**Pets:** give them food like yours rather than special pet food.

**Recycling:** buy recycled and reused products as much as possible, like milk in bottles rather than cartons.

**Smoking:** don’t. Tobacco growing and processing uses land resources and pollutes.

**Transport:** walk, cycle, use public transport. Cars pollute and consume fossil fuels.

“These are the ideals”, Guttins says, “But we are not purists, if you try to go too far you get the Green Blues. And that’s a waste of energy.”

### 1. Comprehension

**Tick the recommendations mentioned in the text:**

- |   |                              |
|---|------------------------------|
| - avoid plastic bags;                                       | - don’t smoke;               |
| - don’t wear clothes made of man-made fibers; -             | don’t eat meat;              |
| - use lead-free petrol;                                     | - use recycled bottles;      |
| - try to use your car as little as possible;                | - don’t use aerosols;        |
| - buy solar panels to supplement your energy needs at home; | - use ecological detergents. |

**Try to do this crossword**

1	2	3	4		5	6		7	8	
---	---	---	---	--	---	---	--	---	---	--

9					10			11		12
13				14			15			
16			17				18			
		19						20	21	
		22					23			
						24				25
26	27		28		29			30		
31				32		33	34			
	35					36		37		
38					39					

### Across

1. Some species are this
2. Large predatory cat
3. Road (abbr.)
4. What we breathe
13. That which encloses some animals before birth
14. Exist
15. Planting this will help the environment
16. Often pronounced like “f”
17. Finger-like part of the foot
18. That thing
19. Gains; deserves gets (money) by working
20. Past tense of hide
22. North-northeast
23. Strange, unusual; opposite of *even*
24. Endangered ocean animals
25. Small pie

### Down

1. An endangered species
2. Near (poetic)
3. Domestic animal
4. Indefinite article
5. A color
6. Past-tense marker
7. A time to celebrate the environment
8. Expire; cease to live
12. Scan written matter with the eyes
14. Made (someone) uninterested by dull talk; drilled a hole
15. The 7<sup>th</sup> note in the sol-fa musical scale (between la & do); a tropical plant
17. Light brown
19. The power that does work and drives machines
21. Not working; not doing anything
23. Exclamation of surprise

- |   |   |
|---|---|
| 29. South America (abbr.)                 | 24. A liquid necessary for life; H <sub>2</sub> O             |
| 30. Japanese unit of money                | 25. Go in   |
| 31. Sweet substance                       | 27. Motor car; vehicle for carrying people                    |
| 33. Preposition                           | 28. Narrow magnetic material used for recording sound         |
| 35. Write on a machine; class or sort     | 32. Concerning about; second note of the sol-fa musical scale |
| 36. Follow as a result; happen afterwards | 34. Number; unit  |
| 38. Negative                              | 37. Southeast   |
| 39. At liberty; not enslaved              |   |

### Scanning-skimming reading

#### Task 1.

The words in **A** are in the article. Match a word in **A** with a definition in **B**.

<b>A</b>	<b>B</b>
Throw away	pieces of unwanted clothes
Dung	to make people want to do something
Rags	waste from animals
Encourage	to dispose of something, as if it is not wanted

#### Task 2.

Look at the title of the article. What do you think the article will be about?

Read the article. The following sentences have been taken out of the text. Where do you think they should go?

- a) And they do not cost the government anything.
- b) Recycling is not new!
- c) They welcome the money.
- d) You are also conserving your money!

- e) ... in the streets of London
- f) ... in a big city like New York

### **Using things sensibly**

Conservation means conserving things – saving them, or using them carefully. When you turn off the light in the daytime you are conserving energy. When you write notes on the back of an old letter, you are conserving materials.

(1).....

Recycling means conserving materials and energy by using things instead of throwing them away. When you recycle glass, paper or metal you conserve materials, energy and money. Recycling is important for three reasons. It reduces pollution. It conserves energy and materials. And it saves money, which then can be spent on other things.

(2)..... Many examples of recycling are found in the natural world. Dung may seem like a waste material to us, but to a dung beetle it is food. When an animal dies, its body can be used as food by other animals. They, like the dung beetle are reducing pollution and recycling materials.

Some things which are useless today were once useful and valuable. A hundred years ago, dog dung was used in factories which made animal skins into shoes and bags. Some people collected dog dung (3)..... and sold it to factories. Modern factories use chemicals...

In Cairo today, 25,000 people make a living from other people's rubbish. Every morning the Zabbaleen go out and search the rubbish dumps. They take the best things they find to sell in the market, but they also collect glass, metal, paper and rags which they sell for recycling. They collect food which they give to their animals. The Zabbaleen help to keep city clean. They do a good Job and conserve money and materials. (4).....

Many ordinary people go to rubbish dumps to search for something that they need. A new door might cost \$50, but it is possible to buy an old one from a dump for \$1.

How much rubbish do you throw out every week? If you live in Los Angeles, you probably throw away about 21 kilograms of rubbish every week. Every man and woman and child in London throws away 6 kilograms of rubbish. The figure for Tokyo is 7 kilograms. Mexico City throws away only three kilograms for each person. Imagine the mountains of rubbish (5)....., which throws away 170,000 tons of rubbish every week (more than 13 kilograms for each person)! Most of this rubbish is useful, valuable, recyclable material.

In some countries there are laws about recycling. Their governments punish people who pollute the environment. But in other countries there are no laws against pollution and their governments do not encourage recycling. This is why Europe and the USA send a lot of their waste to some Asian, African and South American countries. Rich countries have laws against polluting the environment. Many poor countries have no laws against pollution – and (6)..... which richer countries give them for dumping waste.

Laws against pollution make people and companies think carefully about the way they dispose of their waste. But governments need to encourage recycling too.

Comprehension check

*How much can you remember? Check your answers.*

1. What do the Zabbaleen do every day?
2. Who throws out more rubbish every week, a family in Mexico or a family in Japan?
3. Why do Europe and the USA send a lot of waste to other countries?

## TEXT 17

### 1. Read the text “*Nature and Ecology*”

**Don't forget to work in the following way:**

- \* **Look through the text to know what it is about**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary**

### Nature and Ecology

A simple circular flow of income diagram is replaced in ecological economics by a more complex flow diagram reflecting the input of solar energy, which sustains natural inputs and environmental services which are then used as units of production. Once consumed, natural inputs pass out of the economy as pollution and waste. The potential of an environment to provide services and materials is referred to as an "environment's source function", and this function is depleted as resources are consumed or pollution contaminates the resources. The "sink function" describes an environment's ability to absorb and render harmless waste and pollution: when waste output exceeds the limit of the sink function, long-term damage

occurs. Some persistent pollutants, such as some organic pollutants and nuclear waste are absorbed very slowly or not at all; ecological economists emphasize minimizing "cumulative pollutants". Pollutants affect human health and the health of the climate.

The economic value of natural capital and ecosystem services is accepted by mainstream environmental economics, but is emphasized as especially important in ecological economics. Ecological economists may begin by estimating how to maintain a stable environment before assessing the cost in dollar terms. Ecological economists Robert Costanza led an attempted valuation of the global ecosystem in 1997. Initially published in *Nature*, the article concluded on \$33 trillion with a range from \$16 trillion to \$54 trillion (in 1997, total global GDP was \$27 trillion).<sup>[26]</sup> Half of the value went to nutrient cycling. The open oceans, continental shelves, and estuaries had the highest total value, and the highest per-hectare values went to estuaries, swamps/floodplains, and sea grass/algae beds. The work was criticized by articles in *Ecological Economics* Volume 25, Issue 1, but the critics acknowledged the positive potential for economic valuation of the global ecosystem.

The Earth's carrying capacity is a central issue in ecological economics. Early economists such as Thomas Malthus pointed out the finite carrying capacity of the earth, which was also central to the MIT study *Limits to Growth*. Diminishing returns suggest that productivity increases will slow if major technological progress is not made. Food production may become a problem, as erosion, an impending water crisis, and soil salinity (from irrigation) reduce the productivity of agriculture. Ecological economists argue that industrial agriculture, which exacerbates these problems, is not sustainable agriculture, and are generally inclined favorably to organic farming, which also reduces the output of carbon.

Global wild fisheries are believed to have peaked and begun a decline, with valuable habitat such as estuaries in critical condition. The aquaculture or farming of piscivorous fish, like salmon, does not help solve the problem because they need to be fed products from other fish. Studies have shown that salmon farming has major negative impacts on wild salmon, as well as the forage fish that need to be caught to feed them.

Since animals are higher on the trophic level, they are less efficient sources of food energy. Reduced consumption of meat would reduce the demand for food, but as nations develop, they tend to adopt high-meat diets similar to that of the United States. Genetically modified food (GMF) a conventional solution to the problem, presents numerous problems – corn produces its own *Bacillus thuringiensis* toxin/protein, but the pest resistance is believed to be only a matter of time. The overall effect of GMF on yields is contentious, with the USDA and FAO ac-

knowledging that GMFs do not necessarily have higher yields and may even have reduced yields.

Global warming is now widely acknowledged as a major issue, with all national scientific academies expressing agreement on the importance of the issue. As the population growth intensifies and energy demand increases, the world faces an energy crisis. Some economists and scientists forecast a global ecological crisis if energy use is not contained – the Stern report is an example. The disagreement has sparked a vigorous debate on issue of discounting and intergenerational equity.

### **Useful vocabulary**

**consume**

**to referrer**

**to deplete**

**contaminate**

**render harmless waste**

**cumulative pollutants**

**stable**

**capacity**

**impend**

**consumption**

**a major issue**

**a vigorous debate**

### **2. Find Russian equivalents in the text.**

1. Since animals are higher on the trophic level, they are less efficient sources of food energy. 2. Reduced consumption of meat would reduce the demand for food, but as nations develop, they tend to adopt high-meat diets similar to that of the United States. 3. Genetically modified food (GMF) a conventional solution to the problem, presents numerous problems – corn produces its own *Bacillus thuringiensis* toxin/protein, but the pest resistance is believed to be only a matter of time. 4. The overall effect of GMF on yields is contentious, with the USDA and FAO acknowledging that GMFs do not necessarily have higher yields and may even have reduced yields.

### **3. Say if these statements are true or false.**

1. Ecological economists may begin by estimating how to maintain a stable environment before assessing the cost in dollar terms.

2. Pollutants don't affect human health and the health of the climate.
3. The Earth's carrying capacity is not a central issue in ecological economics
4. Food production may not become a problem.

**4. Insert prepositions where necessary.**

1...animals are higher ...the trophic level, they are less efficient sources ...food energy. 2. Reduced consumption ...meat would reduce the demand ... food, but as nations develop, they tend to adopt high-meat diets similar to that ... the United States. 3. Genetically modified food (GMF) a conventional solution ... the problem, presents numerous problems – corn produces its own *Bacillus thuringiensis* toxin/protein, but the pest resistance is believed to be only a matter ... time. 4. The overall effect ... GMF ... yields is contentious, .. the USDA and FAO acknowledging that GMFs do not necessarily have higher yields and may even have reduced yields.

**5. Insert articles where necessary.**

1.... simple circular flow of income diagram is replaced in ecological economics by ... more complex flow diagram reflecting ... input of solar energy, which sustains natural inputs and environmental services which are then used as units of production. 2... potential of ... environment to provide services and materials is referred to as ... "environment's source function", and this function is depleted as resources are consumed or pollution contaminates ... resources. 3. ... "sink function" describes ... environment's ability to absorb and render harmless waste and pollution: when waste output exceeds ... limit of ... sink function, long-term damage occurs. 4. Some persistent pollutants, such as some organic pollutants and nuclear waste are absorbed very slowly or not at all; ecological economists emphasize minimizing "cumulative pollutants". Pollutants affect human health and ...health of the climate.

**6. Make up ten questions based on the text and answer them.**

**7. Give a summary of the text “*Nature and Ecology*”**

**TEXT 18**

**1. Read the text “Ecological problems “**

**Don't forget to work in the following way:**

- \* **Look through the text to know what it is about**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary**

## **Ecological problems**

Ecological problems are causing great damage to our environment. Among the most urgent ones are the ozone layer, acid rains, global warming, toxic pollution of atmosphere, disappearance of forests, contamination of underground waters by chemical elements, destruction of soil in some areas, and threat to some flora and fauna representatives.

The Earth is a home to millions of different kinds of living things, which make up the complex world of nature. Nowadays people try to change their habitats to suit their own needs – to create farmlands or build cities. They create pollution and destroy wildlife habitats by digging the ground up for mining, or by building roads through them. A quarter of all the plants in the world are known to be in a danger or threatened with extinction. There are different types of pollution: water pollution, air pollution, ground pollution and nuclear pollution.

Acid rain falls when poisonous gases from power stations and vehicle exhausts mix with oxygen and moisture in the air. These gases become part of the water cycle and may be carried a long way by the wind before they fall as acid rain, which kills wildlife in lakes, rivers, and forests, and damages the surrounding plant life.

World temperatures are currently rising every year. This so called global warming is caused by the building of gases and water vapor in the atmosphere. These gases form a layer that reflects the heat back to Earth. As the planet warms up, the polar ice caps will start to melt. This could cause sea levels to rise and many habitats will disappear under water.

Ecological problems have no borders. However, environment disasters can be avoided if people broaden ecological education and every person understands that the beauty of nature is extremely fragile. Governments must take serious actions against pollution.

### **Useful vocabulary**

**to create farmlands**

**oxygen**

**moisture**

**habitats**

## **poisonous gases**

### **2. Find Russian equivalents in the text.**

1. Ecological problems are causing great damage to our environment. 2. Nowadays people try to change their habitats to suit their own needs – to create farmlands or build cities. 3. . A quarter of all the plants in the world are known to be in a danger or threatened with extinction. 4. A quarter of all the plants in the world are known to be in a danger or threatened with extinction. 5. Acid rain falls when poisonous gases from power stations and vehicle exhausts mix with oxygen and moisture in the air. 6. These gases form a layer that reflects the heat back to Earth.

### **3. Make up ten questions based on the text and answer them.**

### **4. Give a summary of the text “*Ecological problems*”**

## **TEXT 19**

**1. Read the text “*Environmental issues in Russia*” Don’t forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

### **Environmental issues in Russia**

There are numerous environmental issues in Russia. Many of the issues have been attributed to policies during the Soviet Union, a time when officials felt that pollution control was an unnecessary hindrance to economic development and industrialization. As a result, 40% of Russia's territory began demonstrating symptoms of significant ecological stress by the 1990s, largely due to a diverse number of environmental issues, including deforestation, energy irresponsibility, pollution, and nuclear waste.



Several species, such as the Siberian tiger, are at risk of extinction.

## **Wildlife**

Russia has many protected areas, such as zapovedniks and natural parks, which are made to preserve the natural state of environments. There are currently 101 zapovedniks that cover a total of over 33.5 million hectares. However, some animals, such as the Amur tiger, polar bear and Caucasian leopard, are facing extinction. The Russian government is attempting to revive those populations. A tiger summit was held in St. Petersburg in 2010 to discuss how to save the dwindling tiger population, which is threatened by deforestation and poaching in Russia.

## **Deforestation**

Excessive logging is causing the widespread deforestation of certain areas of Russia. Despite efforts of Russian authorities to preserve forests using nature reserves and parks, funding for park rangers is lacking, limiting the protection of forests. Illegal logging is also widespread, especially in the north-west and in the Far East parts of Russia. It is estimated that Russia loses \$1 billion every year due to illegal logging. According to the Center for Russian Environmental Policy, 16 million hectares of forest are lost each year to a variety of causes, including logging, pollution and fires. Inefficient logging and clearcutting strategies result in 40% of harvested trees never being used, and the implementation of forest protection policies has been slow.

## **Energy**

Inefficient energy usage and the use of fossil fuels is another environmental issue that Russia faces. The Ministry of Fuels and Energy stated that upgrading energy sector equipment could cut carbon emissions by 25%, and the Energy Research Institute predicts that such measures could save up to \$1 billion of fuel every year. 68% of Russia's energy is produced by polluting fossil fuels, and it is a large producer of those fuels.

## **Nuclear energy**



Nuclear power plants (such as the pictured Novo Voronezh Nuclear Power Plant near the city of Novo Voronezh) in Russia present many dangers to Russia's environment.

Nuclear energy is widely used in Russia, and there are currently 31 operating nuclear reactors. However, several of these, such as the one at the Kola NPP, are past their lifespan and have higher probability of nuclear accidents. Instead of being decommissioned, they are still being used. The disposal of nuclear waste is also an issue, due to a lack of funding. Unsafe dumping methods are sometimes used to get rid of nuclear waste, which was dumped into the Sea of Japan until 1993. The Commission of Ecological Security, founded in 1994, helped bring the dumping of nuclear waste into ocean to the public's attention. It is estimated that bringing nuclear safety levels to official standards would cost \$26 billion.

The testing and production of nuclear weapons also had an effect on the environment, such as at the Maya nuclear weapons production plant near Chelyabinsk.

#### Pollution



Factories, such as the Baykalsk Pulp and Paper Mill, have contributed significantly to water pollution in Russia.

#### **Water pollution**

Water pollution is a serious problem in Russia, and 75% of surface water and 50% of all water in Russia is now polluted. This has caused health issues in many cities as well as in the countryside, as only 8% of wastewater is fully treated prior to being returned to waterways. Obsolete and inefficient water treatment facilities, as well as a lack of funding, have caused heavy pollution, and has also resulted in waterborne disease spread, such as an outbreak of cholera spread by the Moskva River in 1995. Industrial and chemical waste is often dumped into waterways, including hydrogen sulfide, which has been linked to the large-scale death of fish in the Black and Caspian seas. Lake was

previously a target of environmental pollution from paper plants, but cleanup efforts since then have greatly reduced the ecological strain on the lake.

### **Air pollution**

Russia's air is among the most polluted in the world, although its quality has been improving since the 1990s. 43.8 million tons of pollutants were released into open air in 1993, of which 24.8 million came from industry and 19 million came from vehicles. Moscow, St. Petersburg, Yekaterinburg and Volgograd, as well as other major industrial and population centers, are the highest concentrations of air pollution. Overall, over 200 cities in Russia exceed pollution limits, and this is increasing as more vehicles appear on the roads. Before the 1990s, most air pollution came from industries. When industrial production declined, emissions of air pollutants from those sources also declined, although the amount of motor vehicles on the roads skyrocketed. Currently, vehicle emissions exceed industry emissions in most Russian cities. Air pollution is attributed to 17% of childhood and 10% of adult diseases, as well as 41% of respiratory and 16% of endocrine diseases.

### **Useful vocabulary**

#### **Environmental issues**

**hindrance**

**deforestation**

**dwindling tiger**

**to estimate**

**probability**

### **2. Find Russian equivalents in the text.**

1. There are numerous environmental issues in Russia. 2. Many of the issues have been attributed to policies during the Soviet Union, a time when officials felt that pollution control was an unnecessary hindrance to economic development and industrialization. 3. As a result, 40% of Russia's territory began demonstrating symptoms of significant ecological stress by the 1990s, largely due to a diverse number of environmental issues, including deforestation, energy irresponsibility, pollution, and nuclear waste.

### **3. Say if these statements are true or false.**

1. Russia has many protected areas, such as zapovedniks and natural parks, which are made to preserve the natural state of environments.
2. The Commission of Ecological Security, founded in 1984, helped bring the dumping of nuclear waste into ocean to the public's attention.

3. Water pollution is a serious problem in Russia, and 65% of surface water and 40% of all water in Russia is now polluted.
4. Overall, over 100 cities in Russia exceed pollution limits, and this is increasing as more vehicles appear on the roads.

**4. Insert prepositions where necessary.**

1. Excessive logging is causing the widespread deforestation ... certain areas ... Russia. 2. ... Efforts ... Russian authorities to preserve forests using nature reserves and parks, funding for park rangers is lacking, limiting the protection ... forests. 3. Illegal logging is also widespread, especially ... the north-west and ... the Far East parts ... Russia. It is estimated that Russia loses \$1 billion every year due to illegal logging.

**5. Insert articles where necessary.**

1. ... disposal of nuclear waste is also ... issue, due to ... lack of funding. 2. Unsafe dumping methods are sometimes used to get rid of nuclear waste, which was dumped into ... Sea of Japan until 1993. 3. ... Commission of Ecological Security, founded in 1994, helped bring ... dumping of nuclear waste into ocean to ... public's attention

**6. Make up ten questions based on the text and answer them.**

**7. Give a summary of the text “*Environmental issues in Russia*”**

**TEXT 20**

**1. Read the text “*World Problems of Ecology*“. Don’t forget to work in the following way:**

- \* **Look through the text to know what it is about**
- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary**

**World Problems of Ecology**

Until recently the planet was a large world in which human activities and the nature were in balance. Acid rain, global warming, ozone reduction, widespread desertification and species loss: we have to face them now.

Ecology and economy are very closely connected. First economy influenced the state of our environment. Now we have to face degradation of soils, water, atmosphere and forests. Millions of trees are dying in Germany’s Black Forest and

thousands of lakes in Sweden are so acidic that nothing can live in them. In Scotland farmers complain that acid rains kill their fish. Forests in Denmark, France, Northern Italy, Greece and Norway are damaged.

Thousands of lakes in Canada and the USA can no longer support fish life. The Mediterranean Sea has one of the dirtiest coastlines in the world. Ten million tons of oil, industrial waste, chemicals are pumped into the sea every year. It causes diseases like typhoid, dysentery, hepatitis and cholera. The Rhone in France, the Po in Italy, the Ebro in Spain and the Nile in Egypt carry pesticides and chemical wastes.

Many industries produce waste products, which can be difficult or dangerous to dispose. Many countries have no storage facilities for the spent nuclear fuel. The search for ways to dispose of radioactive waste goes on. In 1982 seventeen countries took part in the United Nations environmental program. The World Commission on Environment and Development, headed by the Prime Minister of Norway, was set up in 1983 by the United Nations. Its aim was to examine the environment and development problems on the planet and to formulate realistic proposals to solve them.

Now some chemicals are banned and some must be controlled. In several countries there is frequent analysis of the water around the coasts. The time has come for the governments and their people to take responsibility for the policies that cause the environmental damage.

### **Useful vocabulary**

**Acid rain**

**global warming**

**ozone reduction**

**widespread desertification**

**degradation of soils**

**to pump into**

**to dispose**

### **2. Find Russian equivalents in the text.**

1. Many industries produce waste products, which can be difficult or dangerous to dispose. 2. Many countries have no storage facilities for the spent nuclear fuel. 3. The search for ways to dispose of radioactive waste goes on. 4. In 1982 seventeen countries took part in the United Nations environmental program. 5. The World Commission on Environment and Development, headed by the Prime Minister of Norway, was set up in 1983 by the United Nations. 6. Its aim was to examine the

environment and development problems on the planet and to formulate realistic proposals to solve them.

**3. Answer the following questions on the text:**

1. Where are millions of trees dying and thousands of lakes are so acidic that nothing can live in them?
2. Where do farmers complain that acid rains kill their fish?
3. Where can thousands of lakes no longer support fish life?
4. Where are ten million tons of oil, industrial waste, chemicals pumped into every year?
5. When did seventeen countries take part in the United Nations environmental program?

**4. Insert prepositions where necessary.**

1. First economy influenced the state ... our environment. 2. Now we have to face degradation ... soils, water, atmosphere and forests. 3. Millions ... trees are dying ... Germany's Black Forest and thousands of lakes in Sweden are so acidic that nothing can live ... them. 4. ... Scotland farmers complain that acid rains kill their fish. Forests ... Denmark, France, Northern Italy, Greece and Norway are damaged.

**5. Insert articles where necessary.**

1. ... Mediterranean Sea has one of ... dirtiest coastlines in ... world. 2. Ten million tons of oil, industrial waste, chemicals are pumped into ... sea every year. 3. It causes diseases like typhoid, dysentery, hepatitis and cholera. 4. ... Rhone in France, ... Po in Italy, ... Ebro in Spain and ... Nile in Egypt carry pesticides and chemical wastes.

**6. Make up ten questions based on the text and answer them.**

**7. Give a summary of the text "World Problems of Ecology"**

**TEXT 21**

**1. Read the text "Environmental problems in Britain"**

**Don't forget to work in the following way:**

**\* Look through the text to know what it is about**

- \* **Read the whole text and try to understand it.**
- \* **Read sentence by sentence, trying to guess the meaning of new words.**
- \* **Look up the words you do not know in a dictionary**

### **Environmental problems in Britain**

Mankind long believed that, whatever we did, the Earth would remain much the same. We know now that is untrue. Nature is under threat. One country's pollution can be every country's problem. So we all need to work together to safeguard our environment.

We have a moral duty to look after our planet and hand it on in good order to future generation. That does not mean trying to halt economic growth. We need growth to give us the means to live better and healthier lives. We must not sacrifice our future well-being for short-term gains, nor pile up environmental debts which will burden our children. Where there are real threats to our planet we have to take great care. Prevention can often be better and cheaper than cure. But action in Britain is not enough. The Government will play a full part in working out international solutions through bodies like the United Nations, the World Bank, the Organisation for Economic Cooperation and Development, and the European Community.

The British Government will aim:

- ◆ to preserve and enhance Britain's natural and cultural inheritance;
- ◆ to encourage the more prudent and efficient use of energy and other resources;
- ◆ to make sure that Britain's air and water are clean and safe, and that controls over wastes and pollution are maintained and strengthened where necessary.

The world's population doubled between 1950 and 1987. More people means more mouths to feed, and that demands more agricultural land. That in turn can lead to deforestation and soil erosion.

By burning forests, draining wet lands, polluting water courses and overfishing mankind is rapidly driving many species to extinction.

The Government is supporting international efforts for a global agreement to protect species of plant and animal life. The Government is also supporting projects to conserve endangered species of wild life such as the black rhino and the african elephants.

Action Taken

Britain attaches particular importance to the environmental policy of the European Community.

Much has already been achieved: since Britain joined, the Community has adopted some 280 environmental measures, including far-reaching-legislation to combat acid rain, curb pollution from cars and industry, conserve wildlife and ensure public access to information about the environment.

### **Useful vocabulary**

#### **Mankind**

**to halt**

**to safeguard our environment**

**to look after**

**to burden**

**to encourage**

**deforestation and soil erosion**

#### **2. Find Russian equivalents in the text**

1. We have a moral duty to look after our planet and hand it on in good order to future generation. That does not mean trying to halt economic growth. 2. We need growth to give us the means to live better and healthier lives. 3. We must not sacrifice our future well-being for short-term gains, nor pile up environmental debts which will burden our children. 4. Where there are real threats to our planet we have to take great care. Prevention can often be better and cheaper than cure. 5. But action in Britain is not enough. 6. The Government will play a full part in working out international solutions through bodies like the United Nations, the World Bank, the Organization for Economic Cooperation and Development, and the European Community.

#### **3. Answer the following questions on the text:**

1. What did Mankind long believe?
2. What is our moral duty?
3. What will the British Government aim?
4. What is the Government supporting?

#### **4. Insert prepositions where necessary.**

1. The Government is supporting international efforts ...a global agreement to protect species ... plant and animal life. 2. The Government is also supporting projects to conserve endangered species ... wild life such as the black rhino and the African elephants. 3. The Government will play a full part ... working out international so-

lutions ...bodies like the United Nations, the World Bank, the Organization ...Economic Cooperation and Development, and the European Community.

**5. Make up ten questions based on the text and answer them.**

**6. Give a summary of the text “Environmental problems in Britain”**

## TEXT 22

**1. Read the text “*Environmental protection*”**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

### Environmental protection

Our planet Earth is only a tiny part of the universe, but nowadays it's the only place where we can live.

People always polluted their surroundings. But until now pollution was not such a serious problem. People lived in rural areas and did not produce such amount of polluting agents that would cause a dangerous situation in global scale. With the development of overcrowded industrial highly developed cities, which put huge amounts of pollutants into surrounds, the problem has become more and more dangerous. Today our planet is in serious danger. Acid rains, global warming, air and water pollution, and overpopulation are the problems that threaten human lives on the Earth.

In order to understand how air pollution affects our body, we must understand exactly what this pollution is. The pollutants that harm our respiratory system are known as particulates. Particulates are the small solid particles that you can see through rays of sunlight. They are products of incomplete combustion in engines, for example: internal-combustion engines, road dust and wood smoke. Billions of tons of coal and oil are consumed around the world every year. When these fuels are burnt, they produce smoke and other by-products, which is emitted into the atmosphere. Although wind and rain occasionally wash away the smoke, given off by power plants and automobiles, but it is not enough. These chemical compounds undergo a series of chemical reactions in the presence of sunlight; as a result we have smog, mixture of fog and smoke. While such pollutants as particulates we can

see, other harmful ones are not visible. Among the most dangerous to our health are carbon monoxide, nitrogen oxides, sulfur dioxide and ozone or active oxygen. If you have ever been in an enclosed parking garage or a tunnel and felt dizzy or lightheaded, then you have felt the effect of carbon monoxide (CO). This odorless, colorless, but poisonous gas is produced by the incomplete burning of fossil fuels, like gasoline or diesel fuel.

Factories emit tons of harmful chemicals. These emissions have disastrous consequences for our planet. They are the main reason for the greenhouse effect and acid rains.

Our forests are disappearing because they are cut down or burnt. If this trend continues, one day we won't have enough oxygen to breathe, we won't see a beautiful green forest at all.

The seas are in danger. They are filled with poison: industrial and nuclear wastes, chemical fertilizers and pesticides. If nothing is done about it, one day nothing will be able to live in our seas.

Every ten minutes one kind of animal, plant or insect dies out forever. If nothing is done about it, one million species that are alive today may soon become extinct.

And even greater threats are nuclear power stations. We all know how tragic the consequences of the Chernobyl disaster are:

Fortunately, it's not too late to solve these problems. We have the time, the money and even the technology to make our planet a better, cleaner and safer place. We can plant trees and create parks for endangered animals. We can recycle our wastes; persuade enterprises to stop polluting activities, because it is apparent that our careless use of fossil fuels and chemicals is destroying this planet. And it is now more than ever apparent that at the same time we are destroying our bodies and our future.

## Useful vocabulary

**rural area**

**Acid rains**

**global warming air**

**water pollution**

**incomplete combustion**

**to consume**

**consequence**

**to recycle**

## **persuade enterprises**

### **2. Find Russian equivalents in the text.**

1. People always polluted their surroundings. 2. But until now pollution was not such a serious problem. 3. People lived in rural areas and did not produce such amount of polluting agents that would cause a dangerous situation in global scale. 4. With the development of overcrowded industrial highly developed cities, which put huge amounts of pollutants into surrounds, the problem has become more and more dangerous. 5. Today our planet is in serious danger. 6. Acid rains, global warming, air and water pollution, and overpopulation are the problems that threaten human lives on the Earth.

### **3. Answer the following questions on the text:**

1. When did the problem of pollution become dangerous?
2. What problems threaten human lives on the Earth?
3. Why is air pollution harmful?
4. Is it dangerous to breathe polluted air?
5. What does the burning of fuel and fossil fuels produce?
6. What are the most dangerous pollutants?
7. What is the main reason for the greenhouse effect and acid rains on our planet?
8. Can we solve the problem of environmental protection?

### **4. Insert prepositions where necessary.**

1. They are products ... incomplete combustion ... engines ... example: internal-combustion engines, road dust and wood smoke. 2. Billions ... tons ... coal and oil are consumed ... the world every year. 3. When these fuels are burnt, they produce smoke and other by-products, which is emitted ... the atmosphere. 4. Although wind and rain occasionally wash ... the smoke, given off... power plants and automobiles, but it is not enough. 5. These chemical compounds ... a series ... chemical reactions ... the presence of sunlight; as a result we have smog, mixture ... fog and smoke.

### **5. Insert articles where necessary.**

1. They are the main reason for ...greenhouse effect and acid rains. 2.We have ... time, the money and even ... technology to make our planet ... better, cleaner and safer place. 3. We can plant ...trees and create ....parks for endangered animals. 4. And it is now more than ever apparent that at ... same time we are destroying our bodies and our future.4.

**6. Make up ten questions based on the text and answer them.**

**7. Give a summary of the text “Environmental protection”**

### **TEXT 23**

**1. Read the text “*Environmental Problems*”**

**Don’t forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

### **Environmental Problems**

Our environment is constantly changing. There is no denying that. However, as our environment changes, so does the need to become increasingly aware of the problems that surround it. With a massive influx of natural disasters, warming and cooling periods, different types of weather patterns and much more, people need to be aware of what types of environmental problems our planet is facing.

Global warming has become an undisputed fact about our current livelihoods; our planet is warming up and we are definitely part of the problem. However, this isn’t the only environmental problem that we should be concerned about. All across the world, people are facing a wealth of new and challenging environmental problems every day. Some of them are small and only affect a few ecosystems, but others are drastically changing the landscape of what we already know.

Our planet is poised at the brink of a severe environmental crisis. Current environmental problems make us vulnerable to disasters and tragedies, now and in the future. We are in a state of planetary emergency, with environmental problems piling up high around us. Unless we address the various issues prudently and seriously we are surely doomed for disaster. Current environmental problems require urgent attention.



## 15 Major Current Environmental Problems

**1. Pollution:** Pollution of air, water and soil require millions of years to recoup. Industry and motor vehicle exhaust are the number one pollutants. Heavy metals, nitrates and plastic are toxins responsible for pollution. While water pollution is caused by oil spill, acid rain, urban runoff; air pollution is caused by various gases and toxins released by industries and factories and combustion of fossil fuels; soil pollution is majorly caused by industrial waste that deprives soil from essential nutrients.

**2. Global Warming:** Climate changes like global warming is the result of human practices like emission of Greenhouse gases. Global warming leads to rising temperatures of the oceans and the earth's surface causing melting of polar ice caps, rise in sea levels and also unnatural patterns of precipitation such as flash floods, excessive snow or desertification.

**3. Overpopulation:** The population of the planet is reaching unsustainable levels as it faces shortage of resources like water, fuel and food. Population explosion in less developed and developing countries is straining the already scarce resources. Intensive agriculture practiced to produce food damages the environment through use of chemical fertilizer, pesticides and insecticides. Overpopulation is one of the crucial current environmental problem.

**4. Natural Resource Depletion:** Natural resource depletion is another crucial current environmental problems. Fossil fuel consumption results in emission of Greenhouse gases, which is responsible for global warming and climate change. Globally, people are taking efforts to shift to renewable sources of energy like solar, wind, biogas and geothermal energy. The cost of installing the infrastructure and maintaining these sources has plummeted in the recent years.

**5. Waste Disposal:** The over consumption of resources and creation of plastics are creating a global crisis of waste disposal. Developed countries are notorious for producing an excessive amount of waste or garbage and dumping their waste in the oceans and, less developed countries. Nuclear waste disposal has tremendous

health hazards associated with it. Plastic, fast food, packaging and cheap electronic wastes threaten the well being of humans. Waste disposal is one of urgent current environmental problem.

**6. Climate Change:** Climate change is yet another environmental problem that has surfaced in last couple of decades. It occurs due to rise in global warming which occurs due to increase in temperature of atmosphere by burning of fossil fuels and release of harmful gases by industries. Climate change has various harmful effects but not limited to melting of polar ice, change in seasons, occurrence of new diseases, frequent occurrence of floods and change in overall weather scenario.

**7. Loss of Biodiversity:** Human activity is leading to the extinction of species and habitats and and loss of bio-diversity. Eco systems, which took millions of years to perfect, are in danger when any species population is decimating. Balance of natural processes like pollination is crucial to the survival of the eco-system and human activity threatens the same. Another example is the destruction of coral reefs in the various oceans, which support the rich marine life.

**8. Deforestation:** Our forests are natural sinks of carbon dioxide and produce fresh oxygen as well as helps in regulating temperature and rainfall. At present forests cover 30% of the land but every year tree cover is lost amounting to the country of Panama due to growing population demand for more food, shelter and cloth. Deforestation simply means clearing of green cover and make that land available for residential, industrial or commercial purpose.

**9. Ocean Acidification:** It is a direct impact of excessive production of CO<sub>2</sub>. 25% of CO<sub>2</sub> produced by humans. The ocean acidity has increased by the last 250 years but by 2100, it may shoot up by 150%. The main impact is on shellfish and plankton in the same way as human osteoporosis.

**10. Ozone Layer Depletion:** The ozone layer is an invisible layer of protection around the planet that protects us from the sun's harmful rays. Depletion of the crucial Ozone layer of the atmosphere is attributed to pollution caused by Chlorine and Bromide found in Chloro-floro carbons (CFC's). Once these toxic gases reach the upper atmosphere, they cause a hole in the ozone layer, the biggest of which is above the Antarctic. The CFC's are banned in many industries and consumer products. Ozone layer is valuable because it prevents harmful UV radiation from reaching the earth. This is one of the most important current environmental problem.



**11. Acid Rain:** Acid rain occurs due to the presence of certain pollutants in the atmosphere. Acid rain can be caused due to combustion of fossil fuels or erupting volcanoes or rotting vegetation which release sulfur dioxide and nitrogen oxides into the atmosphere. Acid rain is a known environmental problem that can have serious effect on human health, wildlife and aquatic species.

**12. Water Pollution:** Clean drinking water is becoming a rare commodity. Water is becoming an economic and political issue as the human population fights for this resource. One of the options suggested is using the process of desalinization. Industrial development is filling our rivers seas and oceans with toxic pollutants which are a major threat to human health.

**13. Urban Sprawl:** Urban sprawl refers to migration of population from high density urban areas to low density rural areas which results in spreading of city over more and more rural land. Urban sprawl results in land degradation, increased traffic, environmental issues and health issues. The ever growing demand of land displaces natural environment consisting of flora and fauna instead of being replaced.

**14: Public Health Issues:** The current environmental problems pose a lot of risk to health of humans, and animals. Dirty water is the biggest health risk of the world and poses threat to the quality of life and public health. Run-off to rivers carries along toxins, chemicals and disease carrying organisms. Pollutants cause respiratory disease like Asthma and cardiac-vascular problems. High temperatures encourage the spread of infectious diseases like Dengue.

**15. Genetic Engineering:** Genetic modification of food using biotechnology is called genetic engineering. Genetic modification of food results in increased toxins and diseases as genes from an allergic plant can transfer to target plant. Genetically modified crops can cause serious environmental problems as an engineered gene may prove toxic to wildlife. Another drawback is that increased use of toxins to make insect resistant plant can cause resultant organisms to become resistant to antibiotics.

The need for change in our daily lives and the movements of our government is growing. Because so many different factors come into play; voting, governmental issues, the desire to stick to routine, many people don't consider that what they do

will affect future generations. If humans continue moving forward in such a harmful way towards the future, then there will be no future to consider. Although it's true that we cannot physically stop our ozone layer from thinning (and scientists are still having trouble figuring out what is causing it exactly,) there are still so many things we can do to try and put a dent in what we already know. By raising awareness in your local community and within your families about these issues, you can help contribute to a more environmentally conscious and friendly place for you to live.

### **Useful vocabulary**

#### **Pollution**

**global warming**

**overpopulation**

**natural resource depletion**

**waste disposal**

**loss of biodiversity**

**deforestation**

**ozone layer depletion**

**acid rain**

**water pollution**

**urban sprawl**

**public health issues**

**genetic engineering**

#### **2. Find Russian equivalents in the text.**

1. Global warming has become an undisputed fact about our current livelihoods; our planet is warming up and we are definitely part of the problem. 2. However, this isn't the only environmental problem that we should be concerned about. 3. All across the world, people are facing a wealth of new and challenging environmental problems every day. 4. Some of them are small and only affect a few ecosystems, but others are drastically changing the landscape of what we already know.

#### **3. Insert prepositions where necessary.**

1. The need ... change in our daily lives and the movements of our government is growing. Because so many different factors come into play; voting, governmental issues, the desire to stick to routine, many people don't consider that what they do will affect future generations. If humans continue moving forward in such a harmful way towards the future, then there will be no future to consider. Although it's

true that we cannot physically stop our ozone layer from thinning (and scientists are still having trouble figuring out what is causing it exactly,) there are still so many things we can do to try and put a dent in what we already know.

#### **4. Insert articles where necessary.**

The ozone layer is an invisible layer of protection around the planet that protects us from the sun's harmful rays. Depletion of the crucial Ozone layer of the atmosphere is attributed to pollution caused by Chlorine and Bromide found in Chlorofluro carbons (CFC's). Once these toxic gases reach the upper atmosphere, they cause a hole in the ozone layer, the biggest of which is above the Antarctic. The CFC's are banned in many industries and consumer products. Ozone layer is valuable because it prevents harmful UV radiation from reaching the earth. This is one of the most important current environmental problem.

#### **5. Make up ten questions based on the text and answer them.**

#### **6. Give a summary of the text "Environmental Problems"**

### **TEXT 24**

#### **1. Read the text "What are the potential impacts of climate change for the UK?"**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

#### **What are the potential impacts of climate change for the UK?**

Temperatures in the UK have risen by about one degree since the 1970s and, given the levels of greenhouse gas already in the atmosphere, further warming is inevitable over the next three decades or so. The amount of warming will depend on future emissions but even if emissions are cut quickly and sharply to avoid dangerous levels of climate change, there will be some unavoidable impacts that the UK will have to adapt to.

The government's latest climate change risk assessment identifies flood risk, and particularly flooding from heavy downpours, as one of the key climate threats for the UK, alongside stresses on water resources, threats to biodiversity and natural habitats, and the repercussions for the UK from climate change impacts abroad.

Computer models that simulate the climate suggest that, as a result of warming, extremely wet winters could become up to five times more likely over the next 100 years, with more intense downpours in the winter months driving a greater risk of flash floods and river flooding, alongside risks from sea-level rise. Extreme flood events such as those in the summer of 2007 could become more frequent and severe, putting homes, businesses and infrastructure at greater risk. The government estimates that annual damages from flooding alone could increase to between £2bn and £12bn by the 2080s, an increase of about two to 10 times compared with current-day estimates. Critical infrastructure, including water-pumping stations, water treatment works, transport and electricity systems, and schools and hospitals sited in flood-risk areas could also be threatened, while heavy rainfall events could increase the risk of water contamination should sewers overflow. Current governments estimates suggest about 330,000 properties are currently at risk of flooding, and climate change could increase this to between 630,000 and 1.2m by the 2080s. The government's latest climate change risk assessment identifies flood risk, and particularly flooding from heavy downpours, as one of the key climate threats for the UK, alongside stresses on water resources, threats to biodiversity and natural habitats, and the repercussions for the UK from climate change impacts abroad.



### **Useful vocabulary**

**Inevitable**

**flood risk**

**heavy downpours**

**to estimate**

**natural habitats**

**water-pumping stations**

**heavy rainfall events**

## **2. Find Russian equivalents in the text.**

1. Temperatures in the UK have risen by about one degree since the 1970s and, given the levels of greenhouse gas already in the atmosphere; further warming is inevitable over the next three decades or so. 2. The government's latest climate change risk assessment identifies flood risk, and particularly flooding from heavy downpours. 3. Extreme flood events such as those in the summer of 2007 could become more frequent and severe, putting homes, businesses and infrastructure at greater risk. 4. Computer models that simulate the climate suggest that, as a result of warming, extremely wet winters could become up to five times more likely over the next 100 years. 5. Critical infrastructure, including water-pumping stations, water treatment works, transport and electricity systems, and schools and hospitals sited in flood-risk areas could also be threatened. 6. Current governments estimates suggest about 330,000 properties are currently at risk of flooding, and climate change could increase this to between 630,000 and 1.2m by the 2080s.

## **3. Make up ten questions based on the text and answer them.**

**4. Give a summary of the text “What are the potential impacts of climate change for the UK?”**

### **TEXT 25**

#### **1. Read the text “*Urban environmental problems IRKUTSK REGION*”**

**Don't forget to work in the following way:**

- \* Look through the text to know what it is about**
- \* Read the whole text and try to understand it.**
- \* Read sentence by sentence, trying to guess the meaning of new words.**
- \* Look up the words you do not know in a dictionary**

#### **Urban environmental problems IRKUTSK REGION**

In the XXI century, as in earlier epochs, Siberia is still huge but sparsely populated and poorly developed regions in the east of Russia. Therefore, the dynamics of its population is of particular interest as the need to develop the huge natural resources in the vast and remote from the center of the territory, in remote areas, in poorly developed transport communications and the uneven edges of the settlement requires the implementation of special public policy development and the development of Siberia.

Irkutsk region is the subject of the Russian Federation and is part of the East

Siberian economic region. The region is located in the south of Eastern Siberia, near the center of Asia, on the main highways leading from Europe to the Far Eastern regions of Russia and the countries of the Asia-Pacific region.

Cities of Irkutsk region are new cities of the USSR. The social aspect of the construction of new cities was aimed leveling socio-economic development of the eastern part of the country, but above all national economic problem was solved by the industry approach to raw material sources and consumption areas. By the end of the 60s when the problem is the development of the cities Natural Resources and Environment has few people worried. New cities are growing in the field of mining (Zheleznogorsk, Bodaibo) and also in areas of large hydroelectric facilities (Bratsk). The most common type in the city of Irkutsk region has become an industrial city, which developed on the basis of industrial complexes.

Formation of various industries led to the formation of «core» cities. So far, one-third of urban settlements kept their mono-functional; the rest acquired the features of multifunctional through a combination of individual productions or deeper processing of local raw materials. It should be noted that a significant number of such nonfunctional cities and towns in the Irkutsk region made current population of these cities hostage to their economic and environmental situation.

According to the State Committee for Hydrometeorology, seven industrial cities of Irkutsk region are included in the "priority list" of 45 Russian cities with a very high average level of air pollution, including: Angarsk, Bratsk, Zima, Irkutsk, Usolye -Sibirskoye, Cheremkhovo and Shelekhov. The poor state of the environment in these cities, worsening the state of health of the population has led to the fact that their residents, along with general social and economic burdens are heavy additional burden of environmental stress. They actually live in the zone of ecological disaster as the result of years of irresponsible environmental policies, or rather, lack thereof.

In the Irkutsk region significant and rapid development of the economy related to the development of natural and territorial resources in the past, with natural and territorial resources is a pillar in the development of urban spaces and should not be in conflict with the requirements for use, but also to subject these claims. It is hoped that the prospects for economic growth with environmental and urban planning requirements as laid down in the development of its natural resources and territorial in the new century.

## **Useful vocabulary**

**Sparsely  
to remote**

**implementation**

**consumption**

**core cities**

**priority list**

**worsening**

**disaster**

**2. Find Russian equivalents in the text.**

1. Therefore, the dynamics of its population is of particular interest as the need to develop the huge natural resources in the vast and remote from the center of the territory, in remote areas, in poorly developed transport communications and the uneven edges of the settlement requires the implementation of special public policy development and the development of Siberia. 2. Formation of various industries led to the formation of «core» cities. 3. So far, one-third of urban settlements kept their mono-functional; the rest acquired the features of multifunctional through a combination of individual productions or deeper processing of local raw materials. 4. It should be noted that a significant number of such nonfunctional cities and towns in the Irkutsk region made current population of these cities hostage to their economic and environmental situation.

**3. Answer the following questions on the text**

1. Where is Irkutsk region located in?
2. Where did formation of various industries led to?
3. Where are seven industrial cities of Irkutsk region included in According to the State Committee for Hydrometeorology?
4. They actually live in the zone of ecological disaster as the result of years of irresponsible environmental policies, or rather, lack thereof don't they?

**4. Insert prepositions where necessary.**

1. Irkutsk region is the subject ... the Russian Federation and is part ... the East Siberian economic region. 2. The region is located ... the south ... Eastern Siberia, near the center ... Asia, ... the main highways leading ... Europe to the Far Eastern regions ... Russia and the countries ... the Asia-Pacific region. 3. It is hoped that the prospects ... economic growth ... environmental and urban planning requirements as laid down ... the development ... its natural resources and territorial ... the new century.

**5. Insert articles where necessary.**

1. It should be noted that ... significant number of such nonfunctional cities and towns in ... Irkutsk region made current population of these cities hostage to their

economic and environmental situation. 2. According to ... State Committee for Hydrometeorology, seven industrial cities of Irkutsk region are included in ... "priority list" of 45 Russian cities with ... very high average level of air pollution, including: Angarsk, Bratsk, Zima, Irkutsk, Usolye -Sibirskoye, Cheremkhovo and Shelekhov. 3. They actually live in ... zone of ecological disaster as ... result of years of irresponsible environmental policies, or rather, lack thereof.

**6. Make up ten questions based on the text and answer them.**

**7. Give a summary of the text “*Urban environmental problems IRKUTSK REGION*”**

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