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Татьяна Антоновна Муратова

BAIKAL LESSONS. YOUR ENVIRONMENTS. УРОКИ БАЙКАЛА. ТВОИ ОКРУЖАЮЩИЕ СРЕДЫ

Методическое пособие для изучающих экологию на английском языке

Татьяна Муратова

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«Издательские решения»

Муратова Т. А.

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От автора:Курс «Экология на английском языке» предлагается для учащихся, студентов и преподавателей школ с глубоким изучением английского языка, лицеев, гимназий, высших учебных заведений, а также работников сферы экологического просвещения. Предлагаемый материал поможет в изучении специализированной литературы по экологии на английском языке, а также для осуществления проектов совместной работы школьников, студентов и преподавателей разных стран в решении экологических проблем на планете.

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Содержание

Baikal lessons. Your environments. Уроки Байкала. Твои окружающие среды Методическое пособие для изучающих экологию на английском языке

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BAIKAL LESSONS. УРОКИ БАЙКАЛА

YOUR ENVIRONMENTS. ТВОИ ОКРУЖАЮЩИЕ СРЕДЫ

A Resource Manual
for

TEACHING AND LEARNING ECOLOGY IN ENGLISH

A Compilation by: **Tatiana Mouratova**

TATIANA MOURATOVA ECOLOGICAL FOUNDATION

Severobaikalsk, Russia
2020

Об авторе

Татьяна Антоновна Муратова родилась в 1954 году седьмым ребёнком в многодетной семье служащего. Отец, Антон Поликарпович Милюшкин, работал бухгалтером, имея образование 4 класса. Мать, Надежда Ивановна Милюшкина (в девичестве Воронова), была безграмотной крестьянкой. Советская власть позволила всем детям получить бесплатное среднее, средне-специальное и высшее образование. После окончания Байкальской средней школы №10 в 1971 году Татьяна поступила в Иркутский Политехнический институт и окончила его в 1976 году, получив специальность инженера – строителя промышленных и гражданских зданий. 30 лет жизни отдано строительству БАМа, сначала инженером строительных организаций Северобайкальска, затем главным экономистом электросвязи. Кроме производственной деятельности она занималась обширной общественной деятельностью по направлениям: экология, туризм, образование, русская литература, в том числе пушкиноведение и декабристоведение, имеет двоих детей и внука.

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I. GENERAL ITEMS

Economists have long thought of the environment as an unlimited source of resources. They have thought that the atmosphere, forests, rivers and seas are capable of absorbing all the rubbish the economy throws into them. In fact, the economy and the environment are closely related. The environment supplies the economy with all its resources, such as water, timber, minerals and oil. The environment has to absorb all its waste products.

Nevertheless, some economists have always argued that pollution damages the resources. For example, pumping waste gases from a power station does not get rid of them. The waste gases cause acid rain; this leads to forest damage an therefore reduces the resources of forestry industry.

There are many consequences of damaging the environment. One of them is acid rain. Another one is water shortage resulting from abuse of arable lands in agriculture. The third one is destroying the ozone layer of the Earth through pollution from factories and plants. The fourth problem is damage to water and soils. The fifth one is damage to wildlife: numerous species of animals and plants can disappear. Lastly, the most serious danger arising from damaging the environment is the result of the above-mentioned consequences. This is the danger for the life and health of the man.

The territories of the former Soviet Union are suffering many environmental problems. Many of these problems have been caused by economic activities. Apart from the effect of Chernobyl disaster, the worst problem is probably in the area around the Aral Sea. Cotton growing in the region has used huge quantities of water, and the sea's level has fallen by 14 yards. This destroyed fishing industry and led to a damage in soils, crops and wildlife. Many forests in the north of European Russia and the Far East are under threat. A system of dams on the Volga has caused damage to fish.

If we are unable to learn to use the environment carefully and protect it from damage caused by man's activities, very soon we'll have no world to live in.

Topical Vocabulary.

an unlimited source of resources – неисчерпаемый источник ресурсов
to absorb smth. – поглощать
to be closely related – быть тесно связанным
to supply the economy with resources – обеспечивать экономику ресурсами
to damage the resources – нанести вред ресурсам
to pump waste gases – выбрасывать отработанные газы
to cause acid rain – вызвать кислотный дождь
to lead to forest damage – привести к повреждениям
to reduce the resources of – сократить ресурсы чего-либо
water shortage – нехватка воды
to result from – быть результатом чего-либо
abuse of arable lands – неправильное использование земель
destroying the ozone layer – разрушение озонового слоя
damage to water and soils – вред водам и почвам
damage to wildlife – вред дикой природе
species of animals and plants – виды животных и растений
to arise from – возникать вследствие чего-либо
to suffer an environmental problem – сталкиваться с проблемой окружающей среды
the effect of the Chernobyl disaster – последствия Чернобыльской катастрофы
cotton growing – хлопководство

to be under threat – быть под угрозой
a system of dams – система плотин
to use the environment carefully – осторожно использовать
окружающую среду
to protect smth. from damage – защитить что-либо от повреждений

Answer the questions:

1.What have many economists thought of the environment?
2.Why do some economists think that pollution damages the resources?
3.What are the consequences of damaging the environment?
4.What environmental problems suffer the territories of the former Soviet Union?
5.What could happen if we don't learn to use the environment carefully?

Translate into English:

1.Окружающая среда – это не неиссякаемый источник ресурсов.
2.Окружающая среда не может поглощать все отходы, которые экономика выбрасывает.
3.Окружающая среда обеспечивает экономику ресурсами.
4. Загрязнение окружающей среды вызывает кислотный дождь.
5.Загрязнение окружающей среды сокращает ресурсы промышленности.
6.Чрезмерное использование земель ведет к нехватке водных ресурсов.
7.Выбросы отходов в воздух разрушают озоновый слой земли.
8.Выбросы отходов наносят вред земле, почве и дикой природе.
9.Среди проблем окружающей среды на территории бывшего СССР последствия Чернобыльской катастрофы, проблема Аральского моря и другие.
10.Мы должны научиться бережно использовать окружающую среду.

Ecology– The study of the relationships between all living organisms and the environment, especially the totality or pattern of interactions; a view that includes all plant and animal species and their unique contributions to a particular habitat.

Ecosystem – The interacting synergism of all living organisms in a particular environment; every plant, insect, aquatic animal, bird, or land species that forms a complex web of interdependency. An action taken at any level in the food chain, use of a pesticide for example, has a potential domino effect on every other occupant of that system.

Climate Change – this term is commonly used interchangeably with «global warming» and «greenhouse effect», but is more descriptive term. Climate change refers to the buildup of man-made gases in the atmosphere that trap the sun's heat, causing changes in weather patterns on a global scale. The effects include changes in rainfall patterns, sea level rise, potential droughts, habitat loss, and heat stress. The greenhouse gases of most concern are carbon dioxide, methane, and nitrous oxides. If these gases in our atmosphere double, the earth could warm up 1.5 to 4.5 degrees by the year 2050, with changes in global precipitation having the greatest consequences.

Pesticide – A chemical used to kill animal or plant pests.

Smog – Air pollution caused by the mixture of smoke

1. ENVIRONMENTAL PROTECTION

The poisoning of the world's land, air, and water is the fastest-spreading disease of civilisation. It probably produces fewer headlines than wars, earthquakes and floods, but it is potentially one of history's 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 fertilisers 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 are nuclear power stations. We all know how tragic the consequences of the Chernobyl disaster are. People are beginning to realise that environmental problems are somebody else's. They join and support various international organisations 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.

Questions:

1.What is the fastest-spreading disease of civilisation?

2.What planet-wide problems have overpopulation, pollution and energy consumption created?

3.What will happen to our planet if present trends continue?

4.What is happening to the seas and rivers?

5.The Aral Sea is on the brink of extinction. Do you think it's possible to save it?

6. A lot of animals are dying out. But people wear fur coats, crocodile handbags, leather shoes, etc. Are you for or against hunting?

7.Is air pollution a serious problem? Why?

8.What were the tragic consequences of the Chernobyl disaster?

9.Are nuclear power stations dangerous?

10.What is the main cause of the greenhouse effect and acid rains?

11.What do people of different countries do to save our planet?

12.Have you heard of Greenpeace?

The greenhouse effect

A greenhouse?

A greenhouse is a building made of glass, where you can grow flowers and other plants that need a lot of warmth.

How it works

The sun shines in through the glass and warms the greenhouse, and the roof and walls keep the heat from getting out.

Our greenhouse

The Earth is surrounded by a blanket of invisible gases (with names like carbon dioxide) that act just like a greenhouse/ The sun shines in, and the blanket of gases traps the heat like a roof, keeping it close to the planet. That's good – we can't live without warmth.

What's going on

Factories, electric power plants, and cars are making a lot of new gases. Even trees, when they are cut down, give off the gases! These new gases are trapping more and more of the sun's heat. This is called the greenhouse effect, or global warming.

What can happen

If the earth's temperature gets hotter by just a few degrees, it could change the weather all over the planet in big ways. Places that are warm would become too hot to live in, and places that are cold would become warm. The places that grow most of our food could get to hot to grow crops anymore.

Even every kid can help stop the greenhouse effect by using less energy, protecting and planting trees, and by recycling so factories don't need to work as hard making things. This book is full of tips on how to do it!

The ozone hole

The ozone layer

Up in the sky, above the air we breathe, there's a layer of gas called ozone. It helps us by blocking out rays from the sun that can harm our skin, and by letting the rays that are good for us come through. We're lucky to have the ozone to protect us!

What's happening

Now the ozone layer is being damaged by gases that people have made. The gases are called CFCs, and halons. They are used in refrigerators, fire extinguishers, air conditioners, plastic foam, and some other things.

How it happens

The CPCs float up to the top of the atmosphere/ where the layer of ozone is, and «eat up» the ozone just like little Pac-Men.

Our mission

Scientists are very concerned about the ozone layer, because a lot of it has gone away in just a few years. So it's very important that we learn to do something about it.

We can all help to stop the ozone layer from disappearing! For more ideas on how to do that, keep reading!

2. ACID RAINS

Every year more and more plants and animals disappear never to be seen again. Strangely, it is the most thoughtless animal that is causing most of problems – man. Nature is very carefully balanced and if this balance is disturbed, animals can disappear alarmingly fast. Every day, thousands of species of animals draw closer to extinction. There are countless number of species which may become extinct before they are even discovered.

In many lakes the fish are dying. Fishermen are worried because every year there are fewer fish and some lakes have no fish at all. Scientists are beginning to get worried too. What is killing the fish? The problem is acid rain. Acid rain is a kind of air pollution. It is caused by factories that burn coal or oil or gas. These factories send smoke high into the air. The wind often carries the smoke far from the factories. Some of the harmful substances in the smoke may come down with the rain hundreds of miles away. The rain in many places isn't natural and clean any more. It's full of acid chemicals. When it falls in lakes, it changes them too. The lakes become more acidic. Acid water is like vinegar or lemon juice. It hurts when it gets in your eyes. It also kills the plants and animals that usually live in lake water. That is why the fish are dying in lakes. But dead fish may be just the beginning of the problem. Scientists are finding other effects of acid rain. In some large areas trees are dying. Not just one tree here and there, but whole forests. At first scientists couldn't understand why. There were no bugs or disease in this trees. The weather was not dry. But now they think that the rain was the cause. Acid rain is making the earth more acidic in these areas. Some kinds of trees cannot live in the soil that is very acidic. Now scientists are also beginning to study the effects of acid rain on larger animals. For example, they believe that some deer in Poland are less healthy because of acid rain. If deer are hurt by the rain, what about people? This is the question many people are beginning to ask. No one knows the answer yet. But it is an important question for us all.

Acid – A corrosive solution with a **pH** less than7. Vinegar is a common weak acid; battery acid is much stronger.

Acid Rain – You first need to understand Acid Deposition: a complex chemical and atmospheric phenomenon that occurs when emissions of sulphur and nitrogen compounds and other substances are transformed by chemical processes in the atmosphere, often far from the original sources, and then deposited on earth in either wet or dry form. The wet forms (precipitation) are popularly called «acid rain» and fall as rain, snow, or fog. The dry forms are acidic gases or particulates.

Questions**:**

1.This passage is about
(A) fishing
(B) acid rain
(C) air pollution
(D) destructive human activity

2.Every year thousands of species of animals
(A) are hunted for their meat and skins
(B) migrate to other places
(C) starve to death
(D) die out

3.Acid rain is caused by
(A) natural gas
(B) the ozone layer depletion
(C) acidic lake water

(D) emissions of industrial enterprises.

4.Which of the following is true?

(A) Dead fish in lakes is only problem caused acid rains.

(B) Scientists are sure that acid rains are not harmful for mankind.

(C) If we don't make an attempt to stop acid rains we may never see some animals again.

(D) There's no reason to worry about several trees that died of some unknown disease.

5.What was not mentioned in the text?

(A) Acid rain is capable of dissolving some rocks and stones.

(B) Fish are unable to live in the water containing acidic chemicals.

(C) Coal, oil or gas form dangerous combinations after being burnt.

(D) Scientists reckon that if some larger animals can be affected by acid rains, people may be in great danger.

6. Factory smoke

(A) stays over the factories.

(B) is usually clean now.

(C) turns into air.

(D) can travel hundreds of miles.

7. Scientists think acid rain

(A) is killing people

(B) helps kill bugs.

(C) fertilises the soil

(D) is killing trees.

8.The word bug in this context means

(A) an infectious disease

(B) a small insect

(C) a dangerous bird

(D) a small animal

o	s	o	i	l	l	a	k	e	a	e
p	m	u	o	i	l	c	g	a	s	a
d	o	m	b	v	p	i	f	i	s	h
a	k	l	i	s	o	d	m	e	n	f
n	e	o	l	s	t	r	f	r	i	o
g	i	m	e	u	w	a	s	t	e	r
e	t	l	a	g	t	i	n	d	u	e
r	o	c	k	d	n	i	o	c	w	s
w	q	c	e	o	m	s	o	n	e	t
a	n	i	m	a	l	t	i	n	n	s

Look for 10 words from the text «Acid Rains»

Insert the letters

– a_idic
– s_ientist
– c_emicals
– chan_e
– c_use
– e_fect
– we_ther
– im_ortant
– d_seas
– de_r

Translate into English

– Во многих озерах рыба погибает.
– Озера становятся более кислотными.
– Кислотные дожди – это разновидность загрязнения
воздуха.
– Кислотная вода подобна уксусу или лимонному соку.
– Некоторые разновидности деревьев не могут жить в почве, которая очень кислая.
– На некоторых больших площадях деревья погибают.

Up in the sky

When we look up, we see the clouds and the blue sky. But there are other things in the sky that we don't see. Some of these are harmful to the Earth.

What happens

When power plants burn coal to make electricity, and when cars burn gasoline, invisible gases are released into the air. Some of these gases can mix water and make it acidic, like lemon juice or vinegar.

What can happen

Sometimes the gases get into rain clouds, where they get mixed in with rain or snow. Then the acid falls back to earth with the rain or snow. This is called acid rain.

Bad news

Acid rain is extremely harmful to plants, rivers and lakes, and the creatures that live in them. In some places it is killing forests. And it pollutes the water that animals and people need to drink.

Our mission

It's very important for us to stop making acid rain. One good way to do that is to drive our cars less. Another good way is to save energy. The less energy we use, the less coal those power plants will have to burn.

You and your family can save energy in lots of ways. Saving energy means saving the Earth. To find out more about what you.

3. POLLUTION

Man has been trying to make his life easier for many centuries. In doing so, he invented machines and instruments. They have been working – and polluting the world we live in.

In this world around us, there are two things that do not belong to any one country: air and ocean water. In both the air and the water, there is much pollution. People are concerned about the air and the water used by everyone, and they are also concerned about the future of the Earth.

One of the most important pollution problems is in the oceans. Many ships sail in the ocean water – fishing ships, some ships carrying people, some carrying oil. If a ship loses some of the oil in the water, or trash from the ships is put into the ocean, the water becomes dirty. Many fish are dying in the sea, others are getting contaminated. Fishermen catch contaminated fish which may be sold in markets and people may get sick from eating them. Fish may also move to another part of the ocean. Lakes and rivers are getting, too. Some beaches are considered dangerous for swimming.

The second important problem is air pollution.

Cars and factories pollute the air we use. It also destroys the ozone layer which protects the Earth from the dangerous light of the Sun.

Another problem is that our forests are dying from acid rain.

This, in turn, affects the balance of nature.

If we want our children to live in the same world we live in, or in a better and healthier world, we must learn to protect the water, the air and the earth from pollution.

Topical Vocabulary

to invent machines and instruments – изобретать машины и инструменты

to pollute – загрязнять

to be concerned about – беспокоиться о чем-либо

to put trash into – сбрасывать мусор

the polluted water – загрязненная вода

to get contaminated – быть отравленным

air pollution – загрязнение воздуха

to destroy the ozone layer- разрушать озоновый слой

to die from acid rain – погибать из-за кислотных дождей

to affect the balance of nature – оказывать влияние на гармонию в природе

to protect the water, the air and the earth from pollution – защищать воду, воздух и землю от загрязнения

Answer the questions:

1.Why are people concerned about air and water?

2.What are the consequences of water pollution?

3.What are the consequences of air pollution?

4.What should people do if they want to live on the Earth?

Translate into English:

1.Чтобы облегчить свою жизнь, люди изобретали машины и инструменты.

2.Люди озабочены загрязнением воды и воздуха.

3.Суда, сбрасывая отходы в океан, загрязняют воду.

4.Рыба в загрязненной воде умирает или становится ядовитой.

5.Машины и фабрики загрязняют воздух и разрушают озоновый слой Земли.

6.Кислотный дождь нарушает баланс в природе.

7.Люди должны научиться защищать землю и воздух от загрязнения.

Pollution – Any substances in water, soil, or air that degrade the natural quality of the environment, offend the senses of sight, taste, or smell, or cause a health hazard. The usefulness of the natural resource is usually impaired by the presence of pollutants and contaminants.

Pollution Prevention – Actively identifying equipment, processes, and activities which generate excessive wastes or use toxic chemicals and then making substitutions, alterations, or product improvements. Conserving energy and minimising wastes are pollution prevention concepts used in manufacturing, sustainable agriculture, recycling, and clean air \clean water technologies.

Particulates – Liquid or solid particles such as dust, smoke, mist or smog found in air emissions.

Emission – The release or discharge of a substance into the environment. Generally refers to the release of gases or particulates into the air.

Polluter pays – The idea that a person or organisation causing pollution should pay for cleaning it up.

Too much garbage!

Garbage away!

When you throw something away, it goes in a garbage can. Once a week the garbage truck comes and the can is emptied, and that's the last you see of it. But what do you think happens to the garbage then? Does it just disappear? No way!

What happens

Almost all garbage is taken to a garbage dump, or landfill, where the garbage truck empties it onto the ground. After the truck leaves, a big tractor comes along pushes dirt on top of the garbage. So, most of our garbage is just buried.

The big mess

Now we are making so much garbage that in many places, there is not enough room to bury it all.

Our mission

We have to act fast and cut down the amount of garbage we make. Can we do it? You bet!

Here's how

We can recycle (which means re-using materials instead of throwing them away) and precycle (which means not buying things that can't be re-used, like plastic wrapping and other packaging). If we recycle we will produce a lot less garbage, and help our planet green!

Recycling and precycling projects can de lots of fun. To find out more about what you can do, see Guarding Our Buried Treasures, and Be a Paper-Saver.

4. AIR AND WATER POLLUTION

You have read a lot of interesting things about the air, the sun, the sky, the clouds, the rain, about rivers, seas and oceans. All these things around us are parts of our environment. Plants, animals and people need clean land, clean water and clean air. But some people have not learned how to take care of our earth. They are doing harmful things to our land, water and even air. They are making pollution. You can imagine what happens to a living thing if its environment is polluted or changed in a harmful way.

Of course, you cannot see some of the pollution in our country, but as you read this book, you will find out about it.

We are worried about water pollution in the country. Most big cities pour their waste into seas and rivers. For a long time people did not understand the danger. The first alarm came from Japan. Some sixty people died because they had eaten polluted fish.

We love rain. Rain helps our plants to grow big and strong. But sometimes the rainwater is not as clean as it could be. Man- made chemicals get into the air and mix with the rainwater, making acid rain. The acid water runs into rivers and lakes. The rivers and lakes become so acid that fish cannot live there.

We like to go to the river, lake or sea to swim. But if there are chemicals in the water, it is not safe enough for swimming. If the water is polluted, it can make us sick.

Another kind of pollution is air pollution. When there are too

many harmful things in the air, it is polluted.

People and animals need clean air with plenty of oxygen in it. Oxygen is added to the air by plants. So you understand how important it is to have a lot of trees, bushes and grass.

Fume from the chimneys of factories, gases which are in refrigerators and sprays pollute the air. They damage the ozone layer that covers the earth. This layer of gas protects us from the dangerous rays of the sun. There are now holes in the ozone layer because there are too many gases in the air.

With the help of sputnics our scientists discovered two large holes in the ozone layer. One is over the North Pole and the second over the South Pole, over Antarctica. It is very dangerous for people as it can make them sick.

Some people pollute the air by smoking. Too much smoke in the air can hurt our lungs.

The wind blows a lot of the air pollution out to sea. Sometimes the rain helps to clean the air, but sometimes the rain water mixes with the gases in the air. Then the air pollution also becomes land and water pollution.

Air and water pollution is one of the problems millions of people are worried about today.

Questions:

1.What is environment?
2.What water, air, and land do people need?
3.How is water polluted?
4.Why is the rainwater not always clean?
5.What is acid rain?
6.What happens with fish in the rivers and lakes which become acid?
7.What do you know about air pollution?
8.What damages the ozone layer that covers the earth?
9.What does the ozone layer protect us from?
10.What are there in the ozone layer now?
11. Why are the holes in the ozone layer dangerous for people?

12.Do you have air pollution in your city?

Air Quality Standards – The level of selected pollutants set by law that may not be exceeded in outside air. Used to determine the amount of pollutants that may be emitted by industry.

Bubble (Bubble Policy) – Existing sources of air pollution with several facilities may control more than is required at one emission point where control costs are lower, in return for comparable relaxation at a second point where costs are higher or more difficult to achieve.

Water Quality Standards – The combination of a designated use and the maximum concentration of a pollutant which will protect that use for any given body of water. For example, in a trout stream, the concentration of iron should not exceed 1 mg\l

Effluent imitations – Limits on the amounts of pollutants which may be discharged by a facility; these limits are calculated so that water quality standards will not be violated even at low stream flows.

LITTLE BY LITTLE OUR WATERS ARE LOOKING LESS LIKE ART AND MORE LIKE TRASH

t	o	s	c	i	e	n	c	e	t	f
c	z	l	a	n	d	f	t	a	h	a
h	o	s	p	u	t	n	i	k	y	c
e	n	v	i	r	o	n	m	e	n	t
q	e	o	s	s	x	a	f	r	i	o
i	l	m	e	o	y	y	l	f	h	r
c	a	s	a	g	g	i	o	d	u	h
a	y	p	s	d	e	d	o	c	w	o
l	e	c	e	o	n	e	d	n	b	l
s	r	a	i	n	w	a	t	e	r	e

Look for 10 words from the text «Air and water pollution»

Insert the letters

– dan_er – l_nd
– cl_ud – a_id ra_n
– e_rth – d_mage
– _aste – ha_mful t_ing
– pol_ution – an_ther

Translate into English

– Растения, животные и люди нуждаются в чистой земле, чистой воде и чистом воздухе.

– Большинство больших городов сбрасывают свои отходы в моря и реки.
– Долгое время люди не понимали опасность.
– Озонный слой защищает нас от опасных лучей солнца.
– Кислород попадает в воздух с помощью растений.

Water pollution

Water, water

The planet Earth is mostly water. Oceans cover the biggest part of it – and there are lakes, rivers, streams, and even water underground. All life on Earth – from the littlest bug to the biggest whale – depends on this water. It's precious. But we're not doing a very good job of keeping water clean. In many places, the water has become polluted.

Rivers and lakes

Rivers and lakes are polluted by garbage, or by chemicals, which are dumped right into them.

Underground

Underground water can be polluted by gasoline or other harmful liquids that seep into the ground. Some fertilizers and pesticides used on farms or lawns, leak down through the dirt, too.

The seas

The ocean, which is a home to so much life, has been used as a place to dump garbage and poisonous chemicals for a long time. It's getting polluted, too.

Our mission

We need to save our water, to keep it clean and healthy so people, plants and animals will always have some to drink. And so fish and other creatures will have a place to live.

To learn more about what you can do to save water – and keep it clean and healthy – turn to Preserving Our Oceans, Rivers, Lakes, and Streams.

5. AIR AND LAND POLLUTION

The planet Earth is our common home. Everything is connected on the earth. If something goes wrong in some part of the world, everybody suffers. People's activities can make the environment unhealthy. If they are doing harmful things to our land, they are making pollution. Too many people making too much pollution will hurt the country.

People are producing too many gases and because of that the earth is getting hotter. These gases hold heat. Plants and trees help to take gases, such as carbon dioxide, from the air, but we have now destroyed too many trees. There are not enough trees and plants to do this job.

Because the earth is getting hotter, the ice is melting. Because the ice is melting, the level of the sea is slowly rising. Scientists say that in the year 2050 some parts of Great Britain will be under the sea.

Another problem of land pollution is making large piles of trash. Trash is made of boxes, bags, papers, cans, plastics, clothing and bottles. It is also made up of old food called garbage.

Some trash gets burned. When plastics and some other man-made things are burned, gases are given off. Too much of these gases can make people and animals sick.

There will not be as much trash if we learn to use things over and over again. One way to do this is by changing some old thing into a new one. Then it is used again. It is not thrown away.

Another problem of land pollution is using too many chemicals

to grow vegetables and fruit. Too many chemicals in the ground can harm the soil. If our vegetables, fruit and meat are grown without chemicals., they will be safer for us to eat.

So you see how many problems people have got of water, air and land pollution. All this makes people worry about their environment.

1.Why can people's activities make the environment unhealthy?

2.How are people doing harmful things to our land?

3.Why is the earth getting hotter?

4.What takes gases from the air?

5.Why can't trees and plants do this job well?

6.Why is the ice melting?

7.What happens with the level of the sea because the ice melting? 8.What is another problem of land pollution?

9.What is trash made of?

10.What happens when some trash gets burned?

11.What must not we do to have so much trash?

12.What do we use to grow vegetables and fruit?

13.Do many chemicals harm the soil?

Erosion – The wearing away of soil by wind or water, intensified by land- clearing practices related to farming, residential or industrial development, road building, or logging.

Landfill – A method for final disposal of solid waste on land. The refuse is spread and compacted and a cover of soil applied so that effects on the environment (including public health and safety) are minimized. Under current regulations, landfills are required to have liners and leachate treatment systems to prevent contamination of ground water and surface water. An industrial landfill disposes of non-hazardous industrial wastes. A municipal landfill disposes of domestic waste including garbage, paper, etc. This waste may include toxins that are used in the home, such as insect sprays and powders, engine oil, paints, solvents, and weed killers.

Конец ознакомительного фрагмента.