**SUBJECT:** **TO TAKE CARE OF THE PLANET IS TO TAKE CARE OF OUR OWN HOME.**

The Dalai Lama

**OBJECTIVES:** 1. To increase awareness of positive and negative effects that people can have on Nature.

2. To practice in using active vocabulary of the topic 'Ecology' for expressing opinions and discussing problems.

3. To develop listening, reading and speaking skills.

4. To train to work in groups and make up dialogues.

5. To improve using model verbs (should, must, can, may,

 ought to).

6. To teach to be friendly to nature and take care of it.

**PROCEDURE**

**GREETING**

**T.** Good morning, dear children, good morning, dear guests. Today we are going to have unusual meeting. The aim of our lesson is the words of the Dalai Lama **'To take care of the planet is to take care of our own home.'** We shall try to discuss relations between people and nature. W e shall try to name reasons of the main ecological problems. And of course, we shall think about the way out.

**WARM-UP.**

**T.** I'd like to create a warm and friendly atmosphere. It's the basis of a good discussion. Look at the rays of our sun. You can send warm messages to your classmates. Models of pupils answers:

1. I wish you good impressions.

2. I wish you witty answers.

3. I wish you hot discussions.

4. I wish you exciting feelings.

5. I wish you to like our planet.

6. I wish you to understand the aim of our lesson.

7. I wish you to be ready to help our planet.

8. I wish you to care of our land.

9. I wish you to be happy and healthy.

**MAIN PART**

**1. Speaking Skills Development**

**T.** I hope you are in a good mood. Let's return to our main topic. There is a special science which studies this question. It is called 'ecology'. What do you know about it?

**P.** Ecology is a science which studies the relationship between all forms of life on our planet with its environment. This word came from Greek 'oikos' which means 'home'. This idea of 'home' includes the whole planet, its population, the nature, animals, birds, fish, insects, all other living beings and even the atmosphere around our planet.

**T.** Do all of them live a happy and healthy life in our home? Let's speak about it.

**P.** I have found the slogan of our discussion. It is the famous words of Prince Philip of Britain, *'Look after this planet, it's the only one we have.'* The Earth is our home. Unfortunately, we destroy it.

**P.** I'd like to mention the words of Franklin. O. Roosevelt, *'The Nation that destroys its soil, destroys itself'.* Do you agree with these words? I am sure people's activities harm the nature greatly.

**P.** I'd like to mention Mahatma Gandhi words, *'The greatness of a nation can be judged by the way its animals are treated'.* So, remember these words and try to be a great nation.

**P.** We also must remember that we are a part of our planet and we can be punished if we destroy it. *'The Earth doesn't belong to a man, a man belongs to the Earth.'* Chief Seattle.

**P.** The problem of the planet destruction is urgent. The relationship between Man and Nature are complicated. According to his attitude to nature a man can be a Creator and a Destroyer.

**2. Pair Work**

**T.** I agree with you .So, now you are to do such work. Each group gets a set of ecological words. The first group should find the words which belong to the section 'Man, the Creator.' The second group chooses the words which describe 'Man, the Destroyer.'

*(global warming, killing animals, plant trees, nuclear weapon, poison, nature parks, air pollution, rubbish, put filters, acid rains, ozone layer, create zoos, noise pollution, feed animals, overpopulation, reduce pollution, love nature, recycling, cut down trees, water pollution, radiation, use solar and wild energy, save resources, re-use water.)*

Each group will read and translate the word-combination. Then you will make up sentences using these words. But remember the model verbs: should, must, ought to. Please, mention what we should do and what we shouldn't do to find the balance between Man and Nature.

Models. Man, the Creator.

1. We should plant trees and take care of nature parks.

2. Filters must be put at factories and plants to prevent air pollution.

3. We should think over recycling possibilities well and try to develop new ideas of recycling.

4. We should save nature resources for future generation.

5. We should widely use solar and wind energy.

Man, the Destroyer.

1. We mustn't cut down trees, because it will lead to different nature disasters.

2. We mustn't kill animals and poison our land, water, resources and air.

3. We shouldn't destroy ozone layer during different scientific researches.

4. We must reduce using nuclear energy to reduce the level of radiation.

5. We should reduce noise pollution big cities.

**T.** So, you see that people can save our planet or destroy. Everything depends on us.

**3. Vocabulary Skills Development**

 Let's continue our discussion. First we must understand what is environment. Let's make up a word-map.

**ENVIRONMENT. WATER. AIR. PEOPLE. PLANTS. ANIMALS. LAND.**

Now explain your choice.

 **P.** **Water.** Without water, life couldn't exist. Because water is essential to all life, we must manage it intelligently and carefully. We think there is plenty of it in oceans, lakes, rivers and streams. It may even seem as though we have more than we need. Water is essential to people than you may think. We need water for cooking, bathing, transportation and recreation. Most of the water on earth-97 per cent- is salt water stored in oceans. Only about 3 per cent of the earth water is fresh. That`s why we must save and use it carefully.

**P.** **Air.** You certainly know that most of the pollution in big cities comes from cars and buses. Air pollution causes a lot of ecological problems, green effects, holes in the ozone layer. Other problem is plants and factories that pollute the atmosphere, because they don't have good filters. Also nuclear power stations are rather dangerous. To make air clean we need good filters at nuclear power stations, at factories and plants, cars and public transport.

**P. People.** When I look around I realize that not all people understand the importance of nature protection. On fine summer days a lot of people go out of town. They have picnics on the shores of lakes and they often leave behind a lot of rubbish – plastic bags, tins and paper. People are the part of nature and we must remember, that we should be creators but not destroyers of our future.

**P. Plants.** They are dying from acid rains. Deforestation, especially destruction of tropical forests, affects the balance of nature in many ways. It kills animals, changes the climate and ecosystem in the world. It makes me sad, when I see people with huge bunches of forest or meadow flowers. Many of these plants are included into Red Book which contains the names of rare plants and animals.

**P. Animals** are in danger of extinction. E g. The blue whale is the largest animal which has ever lived. They have been hunted for their oil and meat. The African elephant is the world' largest land animal. Even though they are now protected, they are still being hunted, because of their tusks. There is only one way to save wild animals and wild habitats – conservation. That means protecting animals in danger by law, opening more national parks, building fewer new roads, planting more new forests, cutting pollution. If this doesn't happen, many wild animals will soon have just one habitat – the Zoo.

**P. Land.** It means the destruction of soil in some areas. Our land suffers from the depletion of natural resources. It happens because people are preoccupied with economic growth, waste materials are being dumped on land, landscape is being littered. We must harmonize industry and community.

**4. Speaking Skills Development**

**T.** People don't think about nature. They don't think about the harmful effects of their activities. We'll try to imagine what our rivers and forests would say, if they could speak. Your home assignment was to make up the dialogues. Group number 1 – a man and a river, group number 2 – a man and a forest.

**MODEL 1.**

**A RIVER AND A MAN.**

– Hello, dear River. How are you today?

– I'm awful.

– Why? What has happened?

– Oh, don't even ask me about it. Look at me. Look at all the rubbish on my banks. And my water. It is green and muddy. My poor fish is dying.

– Who did it?

– You, people.

– It can't be so. I don't believe you. We only swim in your water in summer and go fishing. Oh, dear. Forgive us. We are awfully sorry. How can we help you?

– It's easy. Put filters, use my water economically and, please, use bins for rubbish. And I shall be glad to meet you on my banks again.

**MODEL 2.**

**A FOREST AND A MAN.**

– Oh, my. What shall I do?

– Hello, dear forest. Why are you so sad?

– I'm becoming smaller and smaller.

– Why?

– You, people, cut down my trees all the time.

– But you have a lot of them.

– You're mistaken. Factories and plants use lots of wood. And remember the great fires. My brothers-forests disappear after them. But we are necessary for people. Where will you get oxygen from?

– It's really a problem. Is there the way out? What should we do?

– The first step is to plant more trees. Then you should use paper economically. And

besides, don't live fires after picnics.

– These steps are easy. I hope we'll be able to help you.

**T.** I think, that people understand it is necessary to start doing something to help nature. There are a lot of ways in which we can help the Earth. One way is to remember the three **Rs: reduce, recycle, reuse**. So, we'd like you to join our party of three Rs. *(pupils give the badges to the guests).*

**5. Group Work**

**T:** Our discussion was about different ecological problems in the world. But first of all we must know the problems of our Motherland. The first group has prepared such information.

**GROUP NUMBER ONE**.

**P.** Hello, I'm going to tell you about our ecological situation in Ukraine. Ukraine is suffering a lot of environmental problems. Many of them have been caused by economic activities. There are many consequences of damaging environment. One of them is water pollution. The Dnipro and other rivers are in danger. They are filled with poison; industrial waste, all kinds of chemical elements and pesticides. Industrial enterprises of large cities waste harmful substances into river and sea's waters. The emissions destroy fishing industry and leads to damage of wild life.

**P.** Another problem is the air pollution. For example, pumping waste gases from a power station or metallurgical plants do not get rid of them. The waste gases cause acid rains.

**P.** The next ecological problem is the problem of the Azov Sea. The Azov Sea is the special case. Because it is such a small sea, it becomes dirty very easily. Many industrial centers such as Mariupol, Berdyansk pour into the sea all kinds of chemicals. It naturally influences the state of the sea water and shore line flora and fauna.

**P.** But the most terrible ecological problem of Ukraine is Chernobyl. The effect of Chernobyl disaster is dangerous and tragic, because we don't know up to the end all consequences of radioactive contamination.

**P.** Another ecological problem is deforestation. Especially it is urgent in the Carpathian mountains. Cutting down the trees led to floods, slides and changes in climate. People suffer from the results of their activities.

**P.** As you see our country has many ecological problems and our authority don't want to decide them. But I really hope that the situation will improve in Ukraine, as well in the whole planet. I think we must be persuasive enough to make state governments really grasp the idea of taking care of the planet.

**T.** The second group collected the information about the ecological problems in our town.

 **GROUP NUMBER TWO**.

**P.** The fist problem, that worth mentioning, is air pollution. The most of the pollution in our town comes from the local plant, which is situated in the centre. Very often we can smell the dirty air. And it causes a lot of problems; green house effect, holes the ozone layer. So, this problem must be sold by putting filters.

**P.** We know that water pollution is a very urgent problem. Our small river the Nichlava is very polluted by our enterprises, people. We can see much litter on the banks of the river. Our local plant of dairy products throws its wastes into the river. So the river is very polluted. We must solve this problem immediately or we shall suffer greatly from it.

**P.** Another important problem is litter. Walking along the streets of our town, we can see that people throw rubbish and it makes our streets dirty and disgusting. This problem can be solved by us. All of us know that we must throw litter into the rubbish bins. Why don't we do it?

**P.** I'd like to mention another problem. It's the rubbish in our forest. These are the traces of holiday-makers. You can see tins, egg-shells, yogurt cartons, paper-bags, bottles left lying about. We forget to pick up our litter after a picnic. It's our shame. Why do we do it?

**T.** So, now we see that we really have a lot of problems to solve. Our nature needs protection. It is a good chance to make some resolution to help to solve environmental problems. I'd like to listen to your ideas.

**OUR RESOLUTIONS.**

1. We must have stricter laws and harsher punishments for illegal actions against nature.

2. We must encourage countries to control the number of trees that are cut down.

3. We must reduce gases emitted from factories. Fit filters to factory chimneys.

4. We should fine people who drop litter.

5. We must recycle paper, cans, bottles, clothes, etc.

6. We must save water, gas, energy, and other natural resources.

7. We must reduce using cars. We should walk or use bicycle instead of going by car.

8. We mustn't dump or pour industrial waste into rivers, seas and oceans.

9. We must control using nuclear power not to cause nuclear pollution.

10. All countries all over the world should join their efforts to protect nature.

**6. Summing up**

**T.** Let's hope that some of your ideas will be taken into consideration and it will be your contribution into solving these problems. But we must remember that the future of our planet, first of all, depends on us.

**7. Home assignment**

**T.** Thank you for the lesson. For your active and diligent work.

Your home assignment is to write the composition on the topic, 'What I can do to protect the environment'.

**Appendix**

 **Information about interesting facts of Earth pollution, wastes and consequences.**

**WATER POLLUTION**.

1. Over 1.5 billion people do not have access to clean, safe water.

2. Almost 4 million people die each year from water related diseases.

3. 98 per cent of water related death occurs in developing world.

4. A typical individual in the United States uses 500 litres of water each day.

6. Half the world's schools do not have access to clean water, no adequate sanitation.

7. On average, women in Africa and Asia have to walk 3.7 miles to collect water.

8. 80 per cent of all illnesses in the developing world comes from water born diseases.

9. A child dies of water born disease about every 15 seconds.

10. A five minute shower in an American household will use more water than a person living in a developing world slum will use in a whole day.

**AIR POLLUTION.**

1. Air pollution is carbon, greenhouse gases, exhausted fumes.

2. Currently China and the U S are the leading generators of dangerous gases by burning coal and petroleum products.

3. Air pollution in our buildings makes people sick causing breathing problems and promotes cancer in the human body.

4. Toxic air pollution is even bigger problem for our children in that they breathe much quicker than adults do.

5. The California Air Resources Board estimates indoor air pollution levels are 25-26 per cent greater than outside levels and can pose serious health problems.

6. Several well-known main types of air pollution include smog, acid rain, the greenhouse effect and holes in the ozone layer.

7. Air pollution in the USA has dramatically decreased over the last three decades as a result of combined efforts of individuals industry and government.

8. The Environmental Protection Agency under authority of the Clean Air Act establishes air quality standards to protect the environment and public's health.

**LAND POLLUTION**.

1. It is the result of human misuse of soil. Poor agricultural practices, digging up of important resources and dumping of garbage underground cause pollution.

2. The excavation of minerals, the increasing of mining activities lead to land pollution.

3. Deforestation is one of the major causes of loosening soil.

4. Generally crops cannot grow and flourish in a polluted soil. Yet, if some crops manage to grow, then those would be poisonous enough to cause serious health problems in people consuming them.

5. Soil is a non-renewable natural resource. This should make us think of how much we value this resource. Damage to the soil can disturb nature's balance and prove a threat to life.

6. It takes more than 500 years to form two centimeters of topsoil.

7. Ten tones of topsoil spread evenly over one hectar of land comes out to e as thick as one Euro.

8. Charles. E. Kellogg, a composer, said, *'Essentially, all life depends upon the soil. There can be no life without soil and no soil without life, they have evolved together.'*

9. I'd like to mention the words of Greek philosopher, poet Xenophanes, *'For all things come from earth, and all things end by becoming earth.'*

**SOME INTERESTING FCTS ABOUT OUR WASTE**.

1. Every Sunday more than 500, 000 trees are used to produce the 88 per cent of newspapers that are never recycled.

2. North Americans throw away 2.5 million plastic bottles every hour.

3. Every year some 45,000 tons of plastic waste are dumped into the word's oceans. One of the results of this is that up to one million seabirds and one hundred thousand marine mammals are killed each year.

4. In less than one hundred thousand years over half of the forest has now been cut, leaving whole areas of the earth bare and unprotected, rendering entire regions lifeless.

5. Over fifty million acres of tropical rain forest are destroyed every year, enough trees to fill all of England and Scotland combined.

6. The Earth's limited supply of natural resources will only be able to sustain two billion humans by 2100, bad news for a world that already feeds 5.9 billion.

7. Higher temperatures cause water volume to expand. In the case of the word's oceans, the effects are visible in rising sea levels (10-25 centimeters on average this century).

8. Today 40 per cent of our waters are still too polluted for fishing and swimming.

9. Every day 50 to 100 species of plants and animals become extinct as their habitat and human influences destroy them.