

**TOPIC: *Nature's Warning***

Lesson 1.

1. Good morning, everyone. We begin our lesson as usually with the news. *So, what is the latest news?* (the students present their pieces of news one by one and repeat them in English) – 5 min.
2. Well, that's enough for the news, let's get down to business. Now you will watch a video presented by Michael Jackson. It is called "Earth Song". While you're watching it you'll have to find the answers to some questions, they are written on the chalkboard. Let's read them:
  - 1). *Why is this clip called "Earth Song"?*
  - 2). *Which people's actions can lead to the death of the Earth?*  
(students watch the video, after that they answer the questions 1 and 2)

**Answer Key:**

- 1). The earth suffers from what we have done to it and it is its cry because it is dying, it is the reaction of the Earth to people's actions which cause its destruction.
- 2). Wars, deforestation, air pollution caused by factories and plants.

I've got one more question. Indeed, it was asked by M. Jackson many times. Do you understand which question I mean? It is, "What about us?" *So, what about us, what about future generations and what is waiting for us in the nearest future if we keep on destroying our planet?*

**Answer Key:**

Our resources will be exhausted, we won't have enough fresh water, no plants, trees to enrich the air with oxygen, therefore we will have only polluted air, polluted water, ..... soil, as the result of it and because of annihilation animals will go on dying. – 10 min.

3. This video is closely connected with the topic of our lesson. It is 'Nature's Warning'.
  - 1). *Can you explain it in English? Give the translation into Russian.*

**Answer Key:**

Nature is trying to say that everything goes wrong, that people don't think about their future and that everything may come to a bad end.

- 2). *Can you think of alternative one?*

Well done. As you can see today we are talking about environmental problems, and as for grammar we're revising Passive Voice. – 3 min.

4. First, look at the chalkboard. There are some words that can help us in our discussion. Repeat after me:
  - acid rain – *rain that contains harmful acid which can damage the environment and is caused by smoke from factories*
  - industrial waste – *unwanted materials or substances that are left after factories and plants have used smth*
  - deforestation – *the cutting or burning down of all the trees in an area*
  - overfishing – *illegal fish slaughter*
  - famine – *a situation in which a large number of people have little or no food for a long time and many people die*
  - flood – *a very large amount of water that covers an area that is usually dry*
  - volcanic eruption – *volcano explodes and sends smoke, fire, and rock into the sky*
  - rising water levels – *increasing amount of water in lakes and rivers*
  - hole in ozone layer – *destruction of a layer of gases that prevents harmful radiation from the sun from reaching the Earth*
  - typhoon – *a very violent storm in tropical areas in which the wind moves in circles*
  - earthquake – *a sudden shaking of the earth's surface that often causes a lot of damage*
  - rubbish – *food, paper, etc. that is no longer needed and has been thrown away (syn. Garbage)*
  - oil spills – *an act of flowing oil over the edge of a container on the surface of oceans and seas*
  - air pollution – *the process of making air dangerously dirty and not suitable for people to use*
  - water pollution – *the process of making water dangerously dirty and not suitable for people to use*
  - noise pollution – *a loud or unpleasant sound which breaks our nerves and weakens energy*
  - land pollution – *the process of making soil dangerously dirty and not suitable for people to use*
  - ultraviolet radiation – *energy in the form of light sent out as purple beams that you cannot see*

Let's discuss some of the new words. Which of the words seem to be unfamiliar to you. Try to explain them in English. Let's read words one by one and copy them.

Answer the questions:

1). Which of the following can you see in the pictures? (Students look at the pictures and relate them to the title. – The pictures show problems that people face or people have caused. – Students match the problem to the pictures.)

**Answer Key:**

Picture1: water pollution

Picture2: deforestation

Picture3: rubbish

Picture4: overfishing

Picture5: oil spills

Picture6: air pollution

2). Which of these problems is our country facing? (students discuss the problems in closed pairs and list them in order of importance)

**Answer Key:**

The problems the country is facing are:

- deforestation
- water pollution
- rubbish
- flood
- rising water levels
- overfishing

3). Can you list them in order from most to least serious?

Now let's do one exercise to see if you remembered the meaning of new words properly. (students do ex. 10 p. 73)

The task is to match the columns to make up sentences. First, go through the prompts and if there is any unknown vocabulary, let's explain it.

And now complete the exercise. Follow the example:

e.g. Industrial waste and sewage pollute rivers, lakes and oceans.

Industrial waste and sewage ( <i>the mixture of waste from the human body and used water that is carried away from houses by pipes or passages under the ground</i> )	damage (destroy)	forests, crops and buildings
Global warming ( <i>the increase in the temperature of the Earth's air</i> )	cause (to make smth happen)	the world's climate
Overhunting ( <i>illegal animal slaughter</i> ) and overfishing	affect (influence)	extinction of rare animal species
Exhaust fumes ( <i>used strong-smelling gas or smoke that is unpleasant to breathe in</i> ) and factory emissions ( <i>an amount of gas or other substance that a machine or factory produces and sends into the air</i> )	pollute (to make dirty and unsuitable)	air pollution
Aerosol sprays ( <i>a small metal container from which a liquid can be forced in a stream of very small drops at high pressure</i> )	generate (to produce or create smth)	the ozone layer
Acid rain	destroy (damage)	rivers, lakes and oceans

**Answer Key:**

Global warming affects the world's climate.

Overhunting and overfishing cause the extinction of rare animal species.

Exhaust fumes and factory emissions generate air pollution.

Aerosol sprays damage the ozone layer.

Acid rain destroys forests, crops and building.

5. Let's revise a bit of grammar. Look at the table on the chalkboard and remind how to form Passive voice. (students explain in English the general structure: the form of the passive is *to be + past participle*. We use passive when we are more interested in the action than the person who did it)

Now let's do some grammar exercises. Pay attention to the new vocabulary usage. (students do ex. 2 p. 84, ex. 12,13 p. 88, ex. 14,15 p. 89) – 10-15 min.

❖ Task 1.

(1). Look at the table and make true sentences about the problems our planet faces. Go through the table and say if there is any unknown vocabulary. Let's explain it by giving examples, synonyms or opposites. Pay attention to the words *as a result of, because of, due to, by*, they can be used to express cause.

Follow the example:

e.g. The air is being polluted by smoke and gases from factories.

<p>The air Fish stocks (<i>the total amount of fish that is available to be used in a particular area</i>) Seas and oceans Forests Crops</p>	<p>is being are being</p>	<p>contaminated (<i>to make a place or substance dirty and dangerous</i>) polluted reduced wiped out (<i>to destroy, remove or get rid of smth completely</i>) destroyed</p>	<p>by due to as a result of because of</p>	<p>oil spills frequent flooding deforestation smoke and gases from factories overfishing</p>
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**Answer Key:**

- Fish stocks are being reduced by overfishing.
- Seas and oceans are being contaminated because of oil spills.
- Forests are being wiped out as a result of deforestation.
- Crops are being destroyed due to frequent flooding.

❖ Task 2.

(2). Fill in: be, is/are, has/have, was/were. In which of the sentences, active or passive, is the action more important than the agent (i.e. the person/thing doing the action)?

Present Simple                      People use alternative fuels for heating.                      Alternative fuels ..... used for heating.

Present Continuous                      Industrial waste is polluting lakes and rivers.                      Lakes and rivers ..... being polluted by industrial waste.

Past Simple	They built this factory more than eighty years ago.	This factory ..... built more than eighty years ago.
Past Continuous	They were cutting down the trees.	The trees ..... being cut down.
Present Perfect	They have dumped rubbish in the lake.	Rubbish ..... been dumped in the lake.
Future Simple	They will plant new forests.	New forests will..... planted.

**Answer Key:**

Pr. S. – are

Pr. C. – are

P. S. – was

P. C. – were

Pr. P. – has

F. S. – be

The action is more important than the agent in the sentences containing passive voice.

*How is the agent introduced?* – With ‘by’.

*Why do most sentences not contain the agent?* – Because the agent is unimportant or understood from the context.

❖ Task 3.

(3). Put the verbs in brackets into the correct passive tense.

- 1) A: When ..... the health warning .....(issue)?  
B: Yesterday.
- 2) A: Why is the river such an awful colour?  
B: Industrial waste ..... (pump) into the river for over a year now.
- 3) A: Did you see the eco-warriors on TV last night?  
B: Yes, they..... (interview) about their latest campaign.

**Answer Key:**

1. was .... Issued
2. has been pumped
3. were being interviewed

❖ Task 4.

(5). Study the table, then fill in *by* or *with*.

First, identify the following words if they are instruments/ materials/ ingredients:

Knife – instrument

Wood – material

Rice – ingredient

by + agent e.g. ‘*Twenty Thousand Leagues under the Sea*’ was written by Jules Verne.

with + tool/material/ingredient e.g. *He was shot with a pistol.*

- 1) The rivers are being polluted ..... industrial waste.
- 2) The fish were caught ..... a net.
- 3) A smog warning was issued ..... the Health Department.
- 4) Heat is trapped ..... greenhouse gases.
- 5) He was cut ..... a knife.

**Answer Key:**

1).by; 2).with; 3).by; 4).by; 5).with.

❖ Task 5.

(4). The last task in grammar is a kind of a test for you. Let's check how you know passive voice. Use the prompts to respond in the passive.

(students do the test on sheets of paper)

- 1) A: Why is the river so dirty?  
B: It (pollute/local factory) .....
- 2) A: There's litter everywhere!  
B: I know. (it/not pick up/for ages).....
- 3) A: Heard that there will be a recycling centre in the city.  
B: Yes, (it/build/right now).....
- 4) A: How often do they collect the rubbish?  
B: It (collect/twice a week).....

**Answer Key:**

1. It has been polluted by the local factory.
2. It hasn't been picked up for ages.
3. Yes, it is being built right now.
4. It is collected twice a week.

- Would you like to know if your answers are right?  
Let's do this exercise orally.

LESSON 2.

1. Now we pass over to a new aspect of our lesson: it is listening and reading.

- The first task is to listen to the cassette and repeat the sentences.
  - Have you seen today's newspaper?
  - Is he in some sort of trouble?
  - I see.
  - Shall we join the campaign?
  - I'm not really surprised.
  - This is a waste of time.
  - It's a total mess.
  - Let's go home.
- Now let's explain the sentences by giving examples.  
e.g. Have you seen today's newspaper? – *Seen* means *read* in this sentence.
- Now study the sentences and try to remember as many of them as possible. Put the copies away and reproduce the sentences one by one.
- Listen to the dialogues and match them to the problems.

**DIALOGUES**

**A**

Linda: **Hey** (hi) Ann! Have you seen today's paper?

Ann: No, not yet. Why?

Linda: That boy from next door is on the front page.

Ann: Oh dear. Is he in some sort of trouble?

Linda: It seems he's organised a **campaign** (*series of actions*) against the new road.

Ann: Oh yes. I remember something being said on the news about that.

Linda: Well, anyway, he and his **supporters** (*someone who agrees or approves the ideas*) are living in the trees there to stop the **developers** (*a person or company that buys land or building*) cutting them down.

Ann: I see. Is he some sort of **eco-warrior** (*a man experienced in fighting for better ecology*) then?

Linda: I suppose so. He's trying to protect the environment and stop another area from being **deforested** (*cut or burn down the trees in an area*).

Ann: You're right. There's a lot of wildlife in those woods that will be destroyed if that road gets built.

Linda: Shall we join the campaign?

Ann: Yeah. Why not? But I'm not living in a tree, you know!

B

Linda: Did you hear the warning on the radio this morning?

Ann: No. What warning?

Linda: Apparently the **air quality** (*the degree to which air is good*) today will not meet **recommended levels** (*suggested amount*).

Ann: What does that mean?

Linda: It means that the air over the city is not moving at all. It's just like a thick cloud of **polluted gas** (*contaminated gas*) all around us.

Ann: **That sounds horrible!** (*unpleasant, upsetting, frightening*)

Linda: It is! Doctors **recommend** (*suggest, advise*) that the **elderly** (*old or becoming old*) and everyone with **breathing difficulties** (*problems with taking air into the lungs and sending it out*) should stay inside all day today.

Ann: Oh dear! It sounds like we'll all have breathing difficulties soon if the air quality doesn't improve.

C

Linda: Oh, this is a waste of time! We've been fishing all morning and we **haven't caught a thing** (*didn't understand*).

Ann: Well, I'm not really surprised. I mean, look at this lake. It's a total mess. The only thing you're likely to catch in this water is a **disease** (*illness*).

Linda: I just don't understand how it got so dirty.

Ann: Well, I suppose the local factories have been **pumping** (*to make liquid or gas move in a particular direction*) their industrial waste into it.

Linda: I hate that. Look! Someone has been **dumping rubbish** (*to put garbage in a careless and untidy way*)! What sort of person would do that in such a **beautiful spot** (*nice place*)?

Ann: Well, I wouldn't, but a lot of people simply don't care about the environment.

Linda: Oh, wait! I've caught something!

Ann: What is it? Let me see! Great — we can have fish for dinner.

Linda: Huh! it's an old boot. **Oh, I'm fed up with this** (*I'm tired of it*). Let's go home.

Ann: I agree.

### **Answer Key:**

Air pollution – dialogue B

Water pollution – dialogue C

Deforestation – dialogue A

- *Can you remember any words related to the theme?*
- Now listen to the dialogues once more and then answer the questions. (students follow the dialogues)

- 1) *What is an eco-warrior?*
- 2) *Why shouldn't the road be built?*
- 3) *What does it mean when air quality does not meet recommended levels?*
- 4) *Who needs to be careful when there is a lot of air pollution?*
- 5) *How has the lake been polluted?*

### **Answer Key:**

- 1) Somebody who tries to protect the environment.
- 2) It will destroy the forest and the wildlife living there.
- 3) The air is not moving at all. It is like a thick cloud of polluted gas and this can cause health problems.
- 4) The elderly and people with breathing difficulties.
- 5) Local factories have been pumping their industrial waste into it.

- Explain the words/phrases in bold by giving examples, synonyms or opposites.
- Let's read the dialogues out. (students in pairs read out the dialogues – 3 pairs)

2. Now it's high time to relax and to do some exercises for our eyes. Zhenya Halitov, you're welcome. (students do exercises for eyes)

3. We go on speaking about the environmental problems that surround us. There are so many of them, and the task for the humanity is to be able to solve as many of them as it is possible to do in a short period of time. We will have such kind of a discussion at our next lesson. Today we are only to illustrate the situation around the earth, its problems. And so we pass over to the next step of our lesson is reading a text.

- Before we start working at it, read the title and say what this text is about. (students give their ideas about the plot of the text)
- Look the text through and find the proofs to your ideas.

- Now look at the chalkboard. There are some words that you will have to match. You will have only one minute to do this task, then we'll check it and see if you have learnt the words of the lesson.

1. Extinction	A. Natural world
2. Chemicals	B. Tropical forest
3. Acid rain	C. Contamination
4. Fossil fuel	D. Fauna
5. Environment	E. Harmful
6. Reduce	F. Annihilation (elimination)
7. Pollution	G. Natural resources
8. Wildlife	H. Pollutants
9. Rainforest	I. Cut down

- Let's check this exercise orally.

**Answer Key:**

1.F; 2.H; 3.E; 4.G; 5.A; 6.I; 7.C; 8.D; 9.B.

- Now we read the text. (students read the text one by one, 2-3 students)

### THE EARTH IS OUR HOME

The Earth is our home, but much of it is dirty and dying.

By the year 2030, they say, 25 % of all animals, birds, fish and insects may be extinct. Every year man cuts down more trees to provide paper, wood, medicines, and mineral fuel. But it's not only trees, which are disappearing. Every rainforest also contains millions of animals, insects and flowers. These are destroyed, too. Is there any solution? Governments in rain-forest countries need to plan and work together. They should protect certain areas and plant new forests.

Cars and factories are very dirty. They can also be dangerous for people, wildlife and environment. One of Europe and North America's most serious pollution problems is 'acid rain'. This happens when factories send gases and chemicals into the air. There they mix, and the mixture is carried for hundreds of miles by the wind and finally, it falls back to earth. This 'acid rain' kills fish and trees. It slowly destroys everything. Industrial countries should control their level of pollution and try to reduce it.

At the moment, 94 % of the world's energy comes from oil, gas and coal. But these 'fossil fuels' won't last forever. There's only enough oil and gas for the next 50 years. Coal will last longer - perhaps about 300 years. And then? Well, one answer is nuclear energy. But, today, after Chernobyl, many people think it's too dangerous. There are four solutions. They all use natural energy in the environment: wind energy, solar energy, wave energy (from the sea), geothermal energy (from 'hot' rocks under the ground). It's clean and natural, but there's another problem: they all are rather expensive.

Today, many scientists and world leaders realize that the Earth is in danger. It's really very simple. Either we stop killing the Earth or we kill ourselves. We need a cleaner, healthier planet. Millions of ordinary people - both young and old-understand this too. Some of them belong to Green organizations in countries all over the world. Groups like 'Green Peace' have already helped to stop some animals hunting. What else can be done?

- Now I will ask you some questions, you find the answers and try to memorise as many answers as possible. This will help you to get ready for the retelling of the text. You try to answer the questions on your own, but if you are not able to do this, use the text.

- 1) Why have 40% of the world's rainforests disappeared in the last 80 years?
- 2) What do the governments need to do?
- 3) What is 'acid rain'?
- 4) How can we solve pollution problems like 'acid rain'?
- 5) How much 'fossil fuel' is left for further generations?
- 6) What kind of energy will replace coal, gas and oil in the future?
- 7) What do you know about 'Green Peace'?

**Answer Key:**

- 1) Every year man cuts down more trees to provide paper, wood, medicines, mineral fuel.
- 2) Governments in rainforest countries need to plan and work together. They should protect certain areas and plant new forests.
- 3) 'Acid rain' is the most serious pollution problems. This happens when factories send gases and chemicals into the air. There they mix, and the mixture is carried for hundreds of miles by the wind and, finally, it falls back to earth.
- 4) Industrial countries should control their level of pollution and try to reduce it.
- 5) 94% of the world's energy comes from oil, gas and coal. But these 'fossil fuels' won't last forever. There's only enough oil and gas for the next 50 years. Coal will last longer - perhaps about 300 years.

6) There are four solutions which use natural energy in the environment: wind energy, solar energy, wave energy (from the sea), geothermal energy (from 'hot' rocks under the ground). But they all are very expensive.

7) Groups like 'Green Peace' have already helped to stop some animals hunting.

➤ Find in the text sentences with passive voice and define the tense that they are used in.

**Answer Key:**

- These *are destroyed*, too. (Pr. S.)
- There they mix, and the mixture *is carried* for hundreds of miles by the wind. (Pr. S.)
- What else *can be done*? (infinitive)

➤ Translate the following into English: (if we have time!)

1). Ежегодно человек вырубает всё больше лесов для удовлетворения своих потребностей в бумаге, древесине, медикаментах и минеральном топливе.

2). Автомобили и работающие предприятия представляют собой угрозу для людей и живой природы. Одна из серьёзнейших проблем загрязнения окружающей среды – это «кислотные дожди». Они медленно разрушают всё вокруг.

3). Индустриальным странам следует контролировать уровень загрязнения и стремиться к постоянному его снижению.

4). Запасов газа и нефти осталось лет на 50. Угля – побольше, а что потом?

5). Сегодня, после трагедии в Чернобыле, многие люди считают, что ядерная энергия опасна.

6). Есть 4 варианта решения этой проблемы. Все они связаны с использованием естественной энергии окружающей среды: энергия ветра, солнечная энергия, энергия воды и геотермальных источников.

**Answer Key:**

1) Every year man cuts down more trees to provide paper, wood, medicines, mineral fuel.

2) Cars and factories are dangerous for people and wildlife. One of the most serious pollution problems is 'acid rains'. They slowly destroy everything.

3) Industrial countries should control their level of pollution and try to reduce it.

4) There's only enough oil and gas for the next 50 years. Coal will last longer. And then?

5) Today, after Chernobyl, many people think that nuclear energy is dangerous.

6) There are four solutions to solve this problem. They are connected with the use of natural energy in the environment: wind energy, solar energy, wave energy (from the sea), geothermal energy.

➤ Try to retell this text in pairs, and if we have some time left one of you will retell it in front of the chalkboard.

4. Now open your exercise-books and put down your homework.

1) learn the new vocabulary for dictation (ex.-book)

2) learn the dialogues in pairs (copy)

3) retell the text 'The Earth is Our Home' (copy)

4) do ex. in grammar (copy)

5) compose a poem using the vocabulary (copy)

5. Now listen to the poem (students listen once).

➤ Answer the question:

*What can cause the death of the Earth according to the poem?*

Only when all the rivers have run dry

And all the fish in the sea have died

Only when all the rainforests have been burnt down

And there is no food for the animals

Only when all the blue skies have been filled with smoke

And the cities of the world have choked

Will the white man understand

That it's too late to save the earth

6. The lesson is over, thank you for your work, everybody gets an excellent mark. Good-bye.