**Lesson 16. Ecological problems.**

**Warming up: Is the statements true or false?**

1. All ecological problems are caused by solar activity.
2. Carbon monoxide is produced only by cars.
3. International Ecological organization is called the International Union for Conservation of Nature and Natural Resources.
4. Man often calls himself a “king of seas”.
5. Ecology is a science studying insects. 6. Economic activity usually has a negative effect on nature.

**Main part.**

1. **Vocabulary**

**environment -** навколишнє середовище **poison -** отрута

**the global warming -** глобальнепотепління **harmful -** шкідливий

**overpopulation -** перенаселення **to die out -** вимирати

**to be in danger -** бути в небезпеці

**to turn off the TV, computer –** виключати телевізор, комп’ютер

**to turn off the taps -** закривати крани

**to save water, energy -** зберегти воду,енергію

**to recycle (papers, bottles, tins) –** перероблювати

1. **Reading. Exercise 1. Read and translate the following text:**

**Environmental problems**

The poisoning of the world’s land, air and water is the disease of civilization and it is potentially one of history’s greatest dangers to human life on earth.

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

The seas are in danger. They are filled with different poisons: industrial and nuclear chemicals. Every ten minutes one kind of animal, plant or insect dies out forever. Industrial enterprises emit tons of harmful substances.

All this facts are the main reason for greenhouse effect and acid rains. An even greater environmental threat are nuclear power stations. People should begin to realize that environmental problems are not somebody else’s. they support various international organization and green parties.

**Exercise 2. Complete the sentences:**

1. … is the disease of civilization.
2. The seas are … .
3. If governments … to want is happening - perhaps we’ll be able … the disaster that … the natural world and all of us with it.
4. They are … with poison: industrial…. .
5. People should begin … that environmental problems are not … .
6. All this facts are the main reason for the … and acid rains.
7. People … various international organization and green parties.

**Exercise 3. Read and translate the dialogues:**

**Dialogue 1.**

* More and more people seem to be worried about the future of our planet.
* That’s because you can’t open a newspaper or watch television these days without seeing report after report about threats to the environment.
* It’s global warming.
* I’m not surprised. If scientists’ predictions come true, we could be facing a truly alarming future.
* You’re right. For example, millions could be driven from their homes by rising sea levels.

**Dialogue 2.**

* Why are you saving those old plastic bags? Just throw them away.
* No, I can’t do that. I’m saving them to reuse them
* It’s hardly worth the effort, surely.
* Oh, it is. One plastic bag reused is one less thrown away. And that’s got to be good for the environment.
* My, my, you are environmentally conscious.
* And why not? We’ve all got a responsibility to protect the environment.

**Dialogue 3.**

* Good afternoon sir. Can you name the most burning problems in terms of the environmental protection?
* Well, actually I have never been interested in such kind of stuff.
* Really? I can hardly believe this. Don’t you mind my telling you just some dry facts?
* If you want to… But I a busy a little bit, you know.
* It won’t take much time. Do you know that every year the world industry pollutes the atmosphere with about 1000 million tons of dust and other harmful substances?
* Now I do. But what can I do about this? I am just ordinary man.
* Sir, you certainly can. If you just try to. For instance you can stop using paper bags or sprays containing Freon. Or persuade your friends not to litter in the street and sort their garbage.
* You know it has some sense but… To look deeper into the problem it is rather hard to get rid of habitual stuff even if is harmful for the environment.
* No doubt modern technologies make our life easier, but soon we will have to pay for this ease.

**Exercises 4. Put the words in the sentences.**

***account for, layer, pollution, impact, reduce, fuels, depletion, contribute, emissions, greenhouse, consumption***

1. Atmospheric \_\_\_\_\_\_\_\_\_\_\_\_\_ threatens the ozone layer.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is a killer made by people.
3. We try to solve water and land \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_problems.
4. The concentration of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ gases increased.
5. A number of gases contribute significantly to the stock of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gases.
6. Atmospheric pollution threatens the ozone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. There are gaps in the ozone \_\_\_\_\_\_\_\_\_\_\_.
8. Ozone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is dangerous for the life on the Earth.
9. Ozone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_can lead to dramatic climatic changes.
10. To \_\_\_\_\_\_\_\_\_\_\_\_\_threats, the scientists say that global emissions must be curtailed.
11. It is difficult to curtail \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of gases.
12. Our party is for curtailing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. A number of gases \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ significantly to the stock of greenhouse gases.
14. Our company \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_much money to help refugees.
15. CO2 has the greatest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. The burning of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_by automobiles and industries are main sources of greenhouse gases.
17. Gasoline is the best \_\_\_\_\_\_\_\_\_\_\_for your car.
18. Incomes and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are higher in the wealthiest countries.
19. Third World countries \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a relatively small proportion of industrial CO2.
20. Catastrophic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of climate changes have caused widespread cries for joint preventive policy to combat environmental pollution.
21. There is great \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ over the extent to which each government must control the emissions produced by its local population, industry and agriculture.
22. **Grammar explanation.**

### English plural nouns

In order to change a singular noun to its plural form in English, you usually add "s". For example, the plural of book is books. The plural of table is tables. These are **regular plurals**.

But there are many nouns which don't follow this rule. For example the plural of fish is fish. The plural of tooth is teeth. These are **irregular plurals**

### Regular plurals:Form: Add "s" to the noun: NOUN + S

While many plural nouns follow this rule, the spelling sometimes differ.

#### Examples:

|  |  |
| --- | --- |
| Singular | Plural |
| snake windowboxboylorrypotatoknife | snake**s** window**s** box**es** boy**s**lorr**ies**potato**es**kni**ves** |

#### Spelling of plurals:

The plural form of most nouns is created simply by adding the letter "s".

* more than one snake = snakes
* more than one girl = girls
* more than one window = windows

Nouns that end in -ch, x, s, zor s-like sounds, however, will require an es for the plural:

* more than one witch = witches
* more than one box = boxes
* more than one gas = gases
* more than one bus = buses
* more than one kiss = kisses

Nouns that end in a vowel + y take the letter **s**:

* more than one boy = boys
* more than one way = ways

Nouns that end in a consonant + y drop the y and take **ies**:

* more than one baby = bab**ies**
* more than one lorry = lorr**ies**

A lot of nouns that end in o take es in the plural:

* more than one potato = potatoes
* more than one hero = heroes

|  |
| --- |
| **o becomes oes** |
| echo | echo**es** |
| embargo | embargo**es** |
| hero | hero**es** |
| potato | potato**es** |
| tomato | tomato**es** |
| torpedo | torpedo**es** |
| veto | veto**es** |

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| Some nouns ending in o break the above rule and get os in the plural form:

|  |
| --- |
| **o becomes os** |
| auto | auto**s** |
| kangaroo | kangaroo**s** |
| kilo | kilo**s** |
| memo | memo**s** |
| photo | photo**s** |
| piano | piano**s** |
| pimento | pimento**s** |
| pro | pro**s** |
| solo | solo**s** |
| soprano | soprano**s** |
| studio | studio**s** |
| tattoo | tattoo**s** |
| video | video**s** |
| zoo | zoo**s** |

 | Other nouns ending in o get either os or oes i the plural forms:

|  |
| --- |
| **o becomes os or oes** |
| buffalo | buffalo**s**/buffalo**es** |
| cargo | cargo**s**/cargo**es** |
| halo | halo**s**/halo**es** |
| mosquito | mosquito**s**/mosquito**es** |
| motto | motto**s**/motto**es** |
| no | no**s**/no**es** |
| tornado | tornado**s**/tornado**es** |
| volcano | volcano**s**/volcano**es** |
| zero | zero**s**/zero**es** |

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Plurals of nouns that end in f or fe usually change the f sound to a v sound and add s or -es.

* more than one kni**fe** = knives
* more than one lea**f** = leaves
* more than one hoo**f** = hooves
* more than one li**fe** = lives
* more than one sel**f** = selves
* more than one el**f** = elves

### Irregular plurals:

#### There are several nouns that have irregular plural forms.

|  |  |
| --- | --- |
| **Singular** | **Plural** |
| fish | fish |
| sheep | sheep |
| barracks | barracks |
| foot | feet |
| tooth | teeth |
| goose | geese |
| tooth | teeth |
| goose | geese |
| child | children |
| man | men |
| woman | women |
| person | people |
| mouse | mice |

Plurals formed in this way are sometimes called irregular plurals or mutated (or mutating) plurals.

* more than one child = **children**
* more than one woman = **women**
* more than one man = **men**
* more than one person = **people**
* more than one goose = **geese**
* more than one mouse = **mice**
* more than one barracks = **barracks**
* more than one deer = **deer**

#### Other irregular plural forms include the following:

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| Some foreign nouns retain their plural. (Note that some of them adapted the s of the English plural form!)

|  |  |  |
| --- | --- | --- |
| **Singular** | **Foreign plural** | **English plural** |
| alga | algae |  |
| amoeba | amoebae | amoebas |
| antenna | antennae | antennas |
| formula | formulae | formulas |
| larva | larvae |  |
| nebula | nebulae | nebulas |
| vertebra | vertebrae |  |

 | Nouns ending in us get a, i or the s of the English plural:

|  |  |  |
| --- | --- | --- |
| **Singular** | **Foreign plural** | **English plural** |
| corpus | corpora |  |
| genus | genera |  |
| alumnus | alumni |  |
| bacillus | bacilli |  |
| cactus | cacti | cactuses |
| focus | foci |  |
| fungus | fungi | funguses |
| nucleus | nuclei |  |
| octopus | octopi | octopuses |
| radius | radii |  |
| stimulus | stimuli |  |
| syllabus | syllabi | syllabuses |
| terminus | termini |  |

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| Nouns ending in um get a, i or the s of the English plural:

|  |  |  |
| --- | --- | --- |
| **Singular** | **Foreign plural** | **English plural** |
| addendum | addenda |  |
| bacterium | bacteria |  |
| curriculum | curricula | curriculums |
| datum | data |  |
| erratum | errata |  |
| medium | media |  |
| memorandum | memoranda | memorandums |
| ovum | ova |  |
| stratum | strata |  |
| symposium | symposia | symposiums |

 | Nouns ending in ex or ix get icesor get the s of the English plural:

|  |  |  |
| --- | --- | --- |
| **Singular** | **Foreign plural** | **English plural** |
| apex | apices | apexes |
| appendix | appendices | appendixes |
| cervix | cervices | cervixes |
| index | indices | indexes |
| matrix | matrices | matrixes |
| vortex | vortices |  |

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| Nouns ending in is becoming es in plural:

|  |  |
| --- | --- |
| **Singular** | **Plural form** |
| analysis | analyses |
| axis | axes |
| basis | bases |
| crisis | crises |
| diagnosis | diagnoses |
| emphasis | emphases |
| hypothesis | hypotheses |
| neurosis | neuroses |
| oasis | oases |
| parenthesis | parentheses |
| synopsis | synopses |
| thesis | theses |

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|  |  |
| --- | --- |
| **singular** | **plural** |
| criterion | criteria |
| phenomenon | phenomena |
| automaton | automata |

 Nouns ending in -on becoming -a:   |

### Nouns that are always singular:

A handful of nouns appear to be plural in form but take a singular verb:

* The **news** is bad.
* **Gymnastics** is fun to watch.
* **Economics**/**mathematics**/**statistics** is said to be difficult.

Some nouns never take the s of the plural and are always singular:

* your **luggage** / **baggage** is so heavy
* I'd like to buy new **furniture** for the house
* you can find more **information**in our website.

**Exercise 5.** **Write down the correct form of the plural:**

|  |  |
| --- | --- |
| 1. city -
2. house -
3. boy -
4. family -
5. life -
6. photo -
7. phone -
 | 1. sandwich -
2. nurse -
3. elf -
4. phenomenon -
5. criterion -
6. village -
7. toy -
 |

#### Exercise 6. Complete with the right plural

1. The police caught the (thiefs/thieves).
2. What are (oxen/oxes/ox) and (geese/geeses/goose)? They are animals!
3. I bought beautiful (scarf/scarves/scarfs) yesterday.
4. Scientists formulate (hypothesis/hypotheses/hypothesises) before they carry out research.
5. I met the (children/childs/those) in the garden.
6. Did you put your (baggage/baggages) in the car? Yes I did.
7. These (wolfs/wolves/wolf) are dangerous.
8. I found the (information/informations) I was looking for.
9. It is difficult to change some religious (beliefs/belives/belief) .

**Exercise 7. Choose the correct form of the noun in each sentence.**
1)I have three (child, children).
2)There are five (man, men) and one (woman, women).
3)(Baby, Babies) play with bottles as toys.
4)I put two big (potato, potatoes) in the lunch box.
5)A few men wear (watch, watches).
6)I put a (memo, memos) on the desk.
7)I saw a (mouse, mice) running by.
8)There are few (bus, buses) on the road today.

#### Exercise 8. What is the correct plural of the word?

1. These (person) \_\_\_\_\_\_\_\_\_\_ are protesting against the president.
2. The (woman) \_\_\_\_\_\_\_\_\_ over there want to meet the manager.
3. My (child) \_\_\_\_\_\_\_\_\_\_ hate eating pasta.
4. I am ill. My (foot) \_\_\_\_\_\_\_\_\_\_\_ hurt.
5. Muslims kill (sheep) \_\_\_\_\_\_\_\_\_\_\_ in a religious celebration.
6. I clean my (tooth) \_\_\_\_\_\_\_\_\_\_\_ three times a day.
7. The (student) \_\_\_\_\_\_\_\_\_\_ are doing the exercise right now.
8. The (fish) \_\_\_\_\_\_\_\_ I bought is in the fridge.
9. They are sending some (man) \_\_\_\_\_\_\_\_\_\_\_\_ to fix the roof.
10. Most (housewife) \_\_\_\_\_\_\_\_\_\_\_ work more than ten hours a day at home.
11. Where did you put the (knife) \_\_\_\_\_\_\_\_\_\_ ? On the (shelf) \_\_\_\_\_\_\_\_\_\_ .
12. (Goose) \_\_\_\_\_\_\_\_\_\_\_\_ like water.
13. (Piano) \_\_\_\_\_\_\_\_\_\_ are expensive
14. Some (policeman) \_\_\_\_\_\_\_\_\_ came to arrest him.
15. Where is my (luggage) \_\_\_\_\_\_\_ ? In the car!

**Homework assignment**: write down - ex.4 (11-21), ex. 8, read in roles - ex. 3.