

Environment

Advanced version

Natural environment is everything around us. It includes people, animals, plants, air, water, sunlight, rocks etc. Natural resources are things in the natural environment we value. There are two sorts of natural resources: renewable and non-renewable resources. Renewable resources can be used repeatedly, for example water, sunlight and wood. Non-renewable resources, such as coal and natural gas, are used up faster than they can be made by nature. People try to protect the resources because the quality of life gets lower when we do not have them. There are many environmental problems, for example air and water pollution, global warming, the ozone hole and deforestation.

Pollution

Pollution means that there are harmful substances in the environment. One of the worst air pollutants is carbon dioxide, which comes from burning fossil fuels. Other ones are methane and CFCs. Air pollution leads to health problems, such as asthma and lung diseases. It also causes the deterioration of the ozone layer and global warming. Water pollution can be caused by toxic waste and chemicals which are used to kill pests in agriculture. Toxic waste kills fish and gets into our drinking water and food. It is estimated that 4000 children die every year from drinking dirty water. Land can become polluted by household rubbish and by industrial waste. Noise pollution happens when the sound coming from industry or traffic reaches harmful levels. It causes stress-related illnesses, high blood pressure and hearing loss.

Global Warming

It is caused by the greenhouse effect. Carbon fossil fuels are burned to produce energy. A lot of carbon dioxide gets into the atmosphere. It traps the sun's heat and this is making the Earth warmer. Other causes of global warming are deforestation, population growth and the destruction of marine ecosystems. Ice melts and sea level rises. Some small islands may disappear. Some regions become wetter, whereas others become dryer. Climate change also leads to desertification. The global temperature of the planet has risen 1.1°C since the Industrial Revolution.

The Ozone Hole

Ozone is a gas whose molecules are comprised of three oxygen atoms. The ozone layer is a protective layer in Earth's atmosphere. It is destroyed by CFCs. These dangerous substances are used in aerosol sprays and refrigerators. Atmospheric ozone absorbs ultraviolet radiation from the sun. Exposure to UV radiation increases risk of skin cancer and damage to plants and marine ecosystems. In 1987 the Montreal Protocol was signed. It is an international treaty which was designed to protect the ozone layer by eliminating the use of CFCs.

Deforestation

Trees are cut down for wood or burned to clear the land for farming. This is a problem because rainforests help to control global warming. They absorb carbon dioxide. It is estimated that about 20% of global warming is due to deforestation. It also leads to the extinction of many species of forest animals. The Earth loses 18.7 million acres of forests per year. The most well-known case is the Amazon rainforest in northern Brazil, but deforestation also takes place for example in Indonesia, Thailand and the Democratic Republic of Congo.

Doplňující otázky

1. What can you do to help our environment as a single individual?

We can reduce the use of cars. For example, we can share cars or use the public transport. We can use recycling bins. When you go shopping, use reusable bags instead of plastic bags. It is also important to save energy.

2. What types of materials can we recycle?

We can recycle paper (blue bin), plastic (yellow bin), glass (green or white bin), beverage cartons (orange bin) and metal (grey bin). Some shops accept electronic waste. You can also return beer bottles at supermarkets.

3. What natural disasters do you know?

Floods, hurricanes, tornadoes, volcanic eruptions, blizzards, earthquakes and tsunamis.

4. What is a hurricane?

It is a violent storm with strong winds and heavy rain.

5. What is a blizzard?

It is a storm with a lot of snow and strong winds.

6. How can we save energy at home?

We can use the sun to dry wet clothes, turn lights and electronics when we leave a room and take short showers instead of baths.

7. What is climate change?

It means that there are global changes in the temperature, rainfall etc.

8. What is wildlife?

Animals and plants that grow independently of people.

9. What are endangered species?

Animals and plants in danger of disappearing in the near future (they are likely to become extinct). The most endangered species are amur leopards, gorillas, sea turtles, orangutans and elephants.

10. What is biodiversity?

It is the variety of life on Earth.

11. What is alternative energy?

Alternative energy is energy that does not come from fossil fuels. Sunlight, wind, rain, waves and geothermal heat are alternative sources of energy. They are renewable. About 16% of global final energy consumption comes from renewable resources.

Důležitá slovíčka

environment	(invaɪrnmənt)	životní prostředí
renewable resources	(riːnəʊəbəl rɪsɪs)	obnovitelné zdroje
coal	(kəʊl)	uhlí
natural gas	(nætʃrəl ɡes)	zemní plyn
pollution	(pəˈluːʃn)	znečištění
global warming	(ɡləʊbəl wɔːmɪŋ)	globální oteplování
ozone hole	(oʊzəʊn haʊl)	ozonová díra
deforestation	(dɪfɒrɪsteɪʃn)	odlesňování
harmful substances	(hɑːmfl səbstənsɪz)	škodlivé látky
toxic waste	(tɒksɪk weɪst)	toxický odpad
pests	(pests)	škůdci
greenhouse effect	(ɡriːnhaʊs ɪfekt)	skleníkový efekt
fossil fuels	(fɒsəl fjuːls)	fosilní paliva

carbon dioxide	(kábon dájoxájd)	oxid uhličitý
trap	(trep)	chytit
ultraviolet radiation	(altr'vaj'let rejdiešjn)	ultrafialové záření
ozone layer	(ouzoun lejr)	ozonová vrstva
flood	(flad)	povodeň
volcanic eruption	(volkenik irapšn)	výbuch sopky
blizzard	(bliz'd)	sněhová bouře
earthquake	(érfkwejk)	zemětřesení
endangered species	(indejndžrd spíšíz)	ohrožené druhy