**Nature and environment**

***Nature & environment***

Talk about:
- ***The seasons of the year*** */roční období/*
- ***The most serious ecological problems****nejvážnější ekologické problémy/*
- ***air pollution***
- ***water pollution  acid rain, global warming, the greenhouse effect...***
- ***land pollution***
- ***Protection of environment /****ochrana životního prostředí (ŽP)/*
- ***Ecological and environmental organizations****/organizace na ochranu ŽP/*

**1. *The seasons of the year:***

**SPRING –**spring is the most beautiful season of the year:
-  the snow melts  - sníh taje
-  flowers and trees bloom – květy a stromy kvetou /**snowdrops** – sněženky, **dandelions** – pampelišky, **daffodils** – narcisy/
-  the birds return from the south – ptáci se vracejí z jihu
-  people start working in the garden
-  we have Easter holidays
**SUMMER** – it is the warmest season of the year. Everything is green, birds sing, the sky is blue. We don’t have to go to school in summer. People travel for a holiday in summer and they visit foreign countries – they go to the sea, to the mountains.
**AUTUMN** (AmE: **FALL**) – it is the season when the leaves on the trees change their colours. At the beginning of autumn the weather is usually still nice and warm – we call this period **Indian summer** /babí léto/ - the fruit ripens /ovocie dozrává/ and people pick it from the trees. Later the weather gets colder, the trees shed their leaves /opadá listí/ and it rains a lot. Birds fly to the south.
**WINTER** – the last season of the year. It starts snowing and freezing /mrzne/. People can do winter sports, such as skiing, snowboarding and ice-skating. In December the Christmas time comes and people buy presents to each other.

**2.**When we talk about environment, we can talk about several problems:
- **acid rain**– kyselý déšť
- **the hole in the ozon-layer**– ozónová díra
- **the greenhouse effect**– skleníkový efekt
- **global warming**– globální oteplování

Our life is dependent on /je závislý na/ 3 elements – the air, the water and the land.
a)  **Air pollution** – it is the biggest problem in big cities where there are many factories and a lot of traffic /doprava/ - it is caused by smoke, dust, emissions, exhaust fumes /výfukové plyny/ - it later causes the acid rain and the greenhouse gases
**Acid rain** – chemicals mix with water in clouds /v oblacích/ and make acid rain which damages buildings, kills trees and pollutes the soil.
**b) Water pollution**– it is caused by the households /domácnosti/ and agriculture – we use detergents /čistící prostředky/ fertilizers /hnojiva/, pesticides /postřiky/ and other chemicals. The water pollution can also be caused by big cargo ships /nákladní lodě/  and tankers – they can cause a catastrophe – for example the oil /ropa/ can get into ocean and kill fish and plants in the ocean
**c)  Soil / land pollution** – it can be contaminated by chemicals or by individuals – we throw out our rubbish /vyhazujeme odpadky/ and so on.

The main problem is caused by the greenhouse gases /skleníkové plyny/ - they influence the greenhouse effect and cause the global warming.
**Global warming** causes /způsobuje/ big changes on the Earth:
-  **the temperature of the atmosphere rises** – teplota atmosféry se zvyšuje
-  **the level of the oceans rises** – hladina oceánů stoupá
-  **the glaciers melt** /ledovce tají/ which may cause floods /záplavy/
-  **the number of very hot days can increase** /zvýšit se/ - this has an effect on the climate changes and the changes in the ecosystem => these changes can affect /má nepříznivý vliv na/ people’s health because we will have to change food and we can have health problems – for example the ultraviolet radiation /ultrafialové záření/ causes the skin cancer /rakovina kůže/, different allergies and eye damage /poškození zraku/
-  **the weather patterns change in many countries** – for example the weather in the cold countries gets warmer and in hot countries – Africa – it can get colder and there can even snow
-  **global warming can cause droughts** /sucha/
-  **some species of animals become endangered or extinct** /they can die out/ – některé druhy zvířat se stanou ohroženými nebo vyhynou
-  **changes on the Earth may cause tornados, earthquakes** /zemetřesení/, **floods**/záplavy/ and **droughts** /sucha/

**3.  *To protect our environment*,**we should:
-  ***use our cars and traffic more efficiently*** – for example 4 people can use one car together instead of driving 4 cars to work or to school => we should use unleaded petrol /bezolovnatý benzín/ and catalytic converters /katalyzátory/
-  ***change travelling by car / bus to riding a bike or walking***
-  ***save electricity*** /šetřit elektřinou/ - turn off the lights, TV, computers when we don’t need them
-  ***save water*** – we should stop the watertaps from dripping /zastavit vodovodní kohoutky, aby nekapaly/
-  ***plant trees*** /sadit stromy/ - a good way to reduce the greenhouse gases because they absorb the carbon dioxine and produce oxygen /kyslík/
-  ***reduce /***redukovat/ and ***recycle*** /recyklovat/ and ***sort*** /třídit/
o  **cans** – plechovky
o  **bottles**– láhve
o  **plastic bags** – plastové sáčky
o  **newspaper** – noviny

-  we should ***buy environmentally friendly products and green products*** – they are marked by a special mark – 3 arrows that make a circle /3 šipky, které tvoří kruh/
-  we should ***use alternative sources of energy*** /náhradní zdroje energie/ to produce electricity and for heating – for example:
o  **geothermal energy** – geotermální energie
o **wind energy**– větrná energie
o **water energy**– vodní energie
o **solar energy**- solární energie
-  ***protect endangered animals and plants***
-  ***stop deforestation*** – we should stop destroying the tropical rain forrests /přestat s ničením tropických deštných pralesů/
-  ***create national parks and nature reserves*** – vytvořit národní parky a přírodní rezervace

**4. *Ecological and environmental organizations***are organizations which look after and fight for /bojují za/ the protection of the environment. These are for example Green Peace, Children of the Earth. They organize public campaigns and they inform the people about the importance of the environmental protection. They also organize protests and help to eliminate the damages to the nature.

**Vocabulary:**
**environment** - životní prostředí
**ecology**– ekologie
**protection of environment** - ochrana životního prostředí
**warning** - varování
**public campaign** - veřejná kampaň
**to ban** - zakázat
**pollution: air, water, land / soil** – znečištění: vzduchu, vody, země
**damage** - škoda
**destroy** - zničit
**to endanger** - ohrozit
**to pollute environment** – znečistit ŽP
**threat** - hrozba
**consequence**- důsledek
**global warming** – globální oteplování
**the greenhouse effect** – skleníkový efekt
**hole in the ozone layer** – ozónová díra
**ultraviolet radiation (UV radiation)** – ultrafialové záření
**skin cancer** – rakovina kůže
**acid rain** – kyselý déšť
**deforestation** – ničení lesů, kácení lesů
**tropical rain forest** – tropický deštný prales
**earthquake**- zemětřesení
**flood**-   záplava, zaplavit
**drought** - sucho
**tornado**- tornádo
**endangered species of animals** – ohrožené druhy zvířat
**extinct species**  - vyhynuté druhy
**exhaust fumes** - výfukové plyny
**smog**- smog
**dangerous chemicals** – nebezpečné chemikálie
**carbon dioxide** - kysličník uhelnatý
**detergents**- čistící prostředky
**lead**- olovo
**poison**- jed
**sulphur**- síra
**toxic waste** – toxický odpad
**pesticides**– pesticidy, postřiky
**fertilizers**- hnojiva
**waste** - odpad
**rubbish**- odpadky
**sewage**/sjuidž/ - odpadová kanalizace  **industrial and city waste** - průmyslový a městský odpad
**leak into the soil** - prosakovat do půdy
**greenhouse gases** – skleníkové plyny
**energy**- energie
**electricity**- elektřina
**fossil fuel** - pevné / fosilní palivo
**coal**- uhlí
**oil** - ropa, nafta, olej
**nuclear power station** - atomová elektrárna
**nuclear waste** – nukleární odpad
**radiation** - záření
**dump**- smetiště, skládka odpadků
**contaminate**- znečistit, zamořit
**ecosystem** - ekosystém
**environmental group** – skupina na ochranu ŽP,
**environmentally friendly**- šetrný k životnímu prostředí
**solution**- rešení
**green (product)** - ekologicky nezávadný (výrobek)
**recycle** - recyklovat