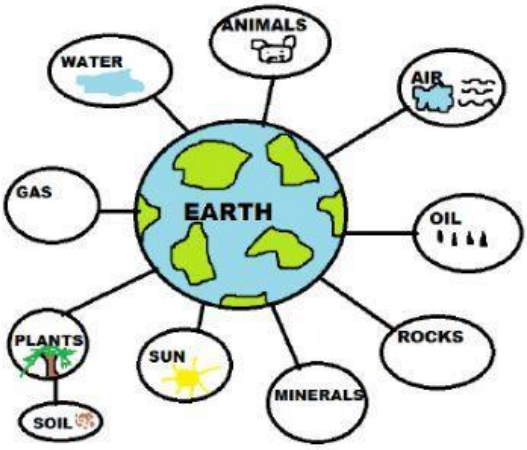
Natural Resources and Pollution



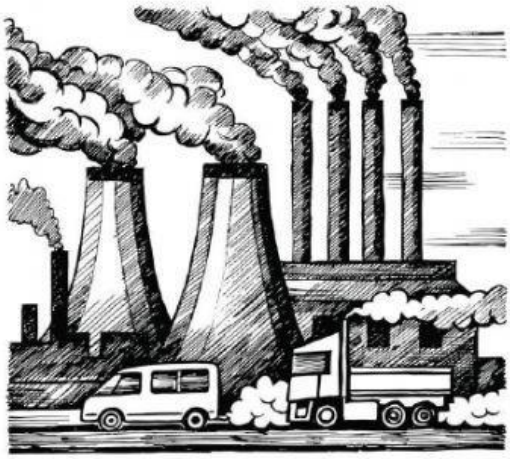
Natural resources are materials found the environment that are useful to humans. Natural resources can be grouped as renewable or nonrenewable.

A **renewable** resource can be replaced or used over and over again. Some renewable resources are *soil, air, water,* and *trees.*

A **nonrenewable** resource is a resource that cannot be replaced easily or reused. Some nonrenewable resources are: fossil fuels such as oil, coal, and natural gas.

Pollution of Natural Resources

When natural resources such as, air, soil and water become polluted; they are unsafe for use.
What is pollution? **Pollution** is any waste product that damages an ecosystem. The harmful substance is called **pollutants.** There are three common types of pollution: **air pollution, land pollution** and **water pollution.**



Air pollution

Air can be polluted in several ways.

- Exhaust fumes from motor vehicles
- Smoke from factories and ships
- Smoke from cigarette
- Greenhouse gases
- Chlorofluorocarbons (CFC's)
- Acid rain

The Effects of Air Pollution

When these pollutants such as smoke and exhaust fumes mix with water vapour in the air, they produce acid rain. **Acid rain** contain a combination of gases and solid particles that produce smog. Acid rain damages trees and destroys soil. Run-off from acid rain can kill plants and animals in lakes and ponds.

Air can be polluted by the addition of **chlorofluorocarbons. [CFC's]** these are gases used in *refrigerators, air conditioners, spray cans,* and *fire extinguishers*. CFC gases float to the top of the atmosphere and breakdown the ozone layer. This allows harmful radiation from space to enter the atmosphere. The radiation causes humans to develop cancer.

Another harmful effect of pollution is the "**greenhouse effect**". This is the trapping of heat in the atmosphere.

LIVEWORKSHEETS

Land pollution.

The land is being polluted. The land is being polluted in the following ways:

- Garbage from homes and businesses
- Chemical waste from industries and farming are being dumped into and on the land.

Land pollution can be reduced by using specially designed *landfills* and *leak proof cans*.

Water pollution.

Most of the water on Earth is saltwater. Both saltwater and freshwater are being polluted by a variety of sources, including:

- Sewage
- Garbage (plastic bags and plastic bottles can kill marine animals)
- Chemicals like motor oil, bleach and other chemicals, herbicides, pesticides and fertilizers.

Pollution promotes breeding of vectors and also provides vectors with homes.

Some items that pollute the resources are ***biodegradable*** (able to decay naturally and in a way that is not harmful), but others are ***non-biodegradable*** wastes (cannot be decomposed or dissolved by natural agents).

Conservation is the wise use of natural resources. Resources can be conserved by **reducing** (using what is needed), **reusing** (use things again), and **recycling** whatever possible. Whenever possible.

REVIEW QUESTIONS: Answer the following questions in complete sentence.

1. Define natural resources. [1]
2. Contrast renewable and nonrenewable resources.[2]

2b. Give an example of each. [1]

3a. What is pollution? [1]

3b. Name **three** forms of pollution. [3]

4. Name **two** causes of air pollution.[2]
5. Gases of chlorofluorocarbons may come from three products. Identify two. [2]
6. What illnesses does air pollution cause to humans? [1]
7. Describe the greenhouse effect. [1]
8. Give **two** ways in which land can be polluted. [2]
9. Name **two** ways water is polluted. [2]
10. Define the term conservation. [1]
11. Give the name of the 3R's of conservation and explain what each means.[6]

Total Marks: 25

LIVEWORKSHEETS