

Our Environment Notes





INTRODUCTION

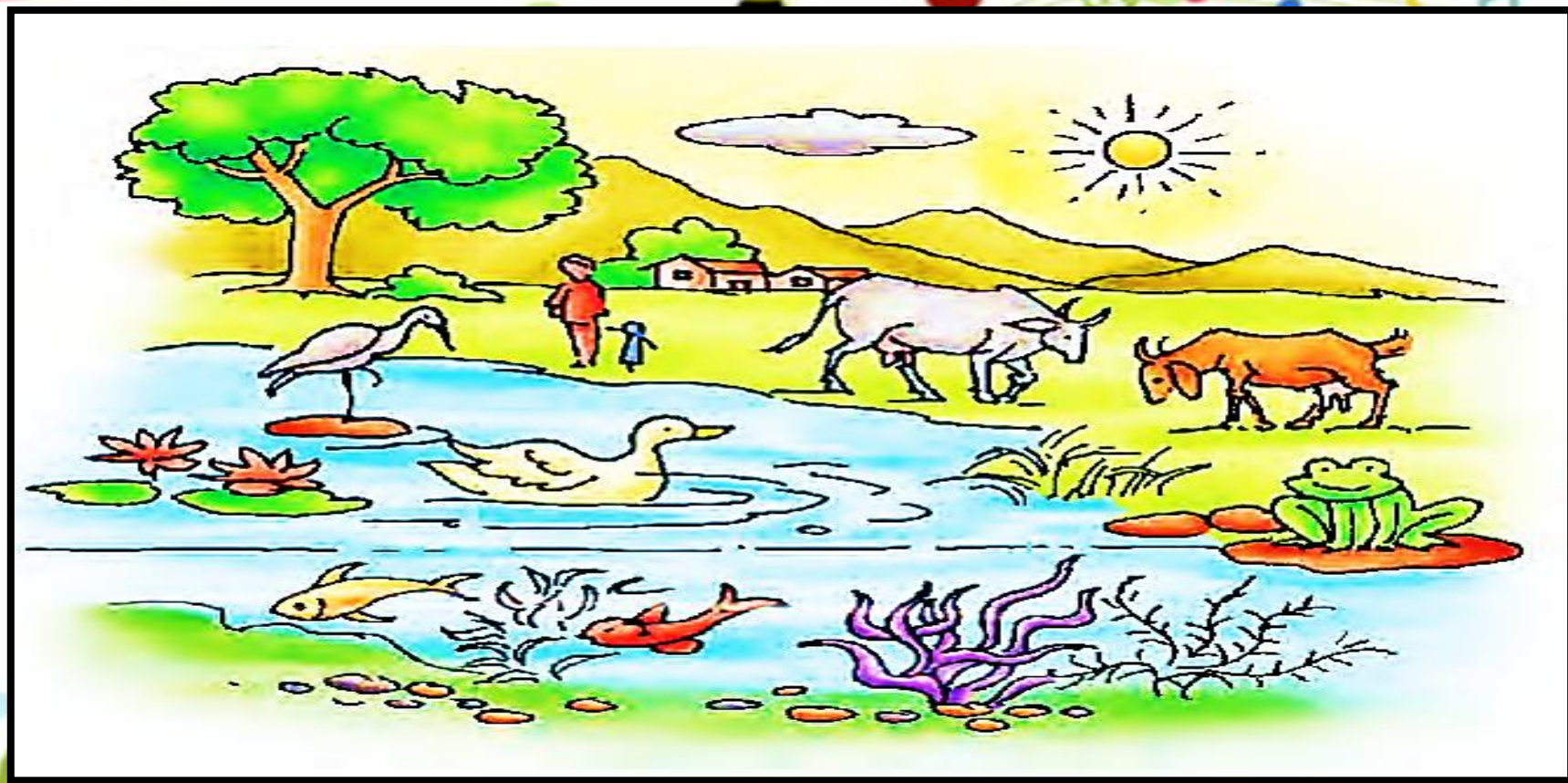
All living and non-living things around us form the environment. Everything that forms the surroundings of a living thing is called environment.





Every living thing has its own environment. For example, the environment of a plant includes the water, air, sun, weather, soil and the creatures living in it.







WHAT DO WE GET FROM THE ENVIRONMENT?

We depend on the environment for all our needs. It provides us food, water, air, clothing and other materials we use in our daily life.





How Do We Damage Our Environment?

Human beings have found many new ways to keep themselves comfortable. To make our life comfortable, we are damaging our environment in many





ways. We are polluting our land, water and air by adding harmful substances. Pollution of land, water and air has harmful effects on the health of the entire world.







We have destroyed the forests to build cities and factories. Now there are fewer trees to clean the air. Trees also bind the soil. Soil becomes loose when we cut the trees. It can then be easily washed away by wind and rain. Fertile top soil is thus lost. This is called soil erosion.





Cutting trees





Factories emit smoke and poisonous gases in the air. Vehicles also emit harmful gases. Wastes from the factories and homes are thrown into the water sources or buried in the soil. This pollutes the water and soil and damages the plants and animals living there.





Smoke from factories polluting air



POLLUTION

The presence of harmful substances in the air, water and land that can cause harmful effect on the plants and animals is called pollution .The impurities which pollute the environment are called the pollutant .





Air Pollution

Harmful substances like dust, ash, smoke, etc. and harmful gases like carbon monoxide, sulphur dioxide, etc. deteriorate the quality of air. This is called air pollution.







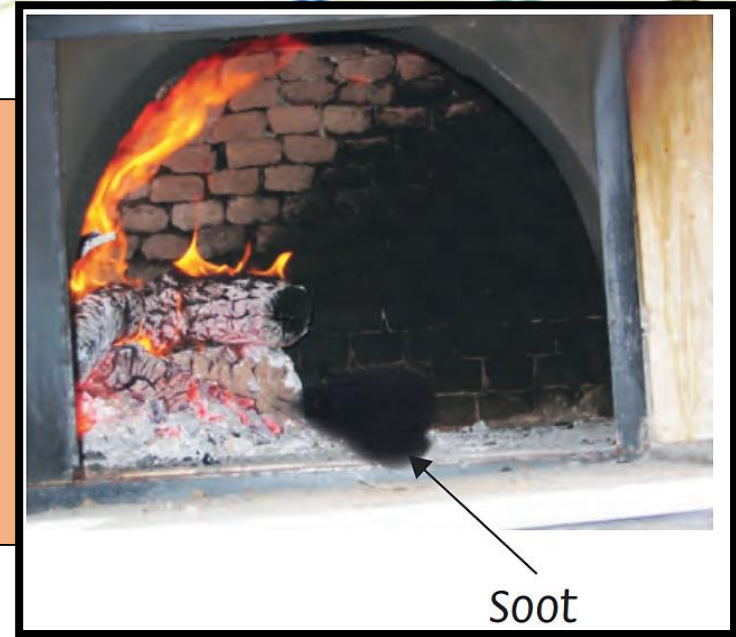
Sources of Air Pollution

Everyday large amount of pollutants are added to the air. Following are the sources of the pollutants.





- a. Dust storms carry dust and ash to the air.
- b. Smoke produced by burning of wood and coal contains harmful gases like carbon monoxide and solid particles called soot .





- c. Smoke from burning of garbage, contains gases like carbon monoxide.**
- d. Burning of petrol and diesel, produces gases like sulphur dioxide and nitrogen oxide.**
- e. Smoke emitted by the factories, contains soot and harmful gases.**






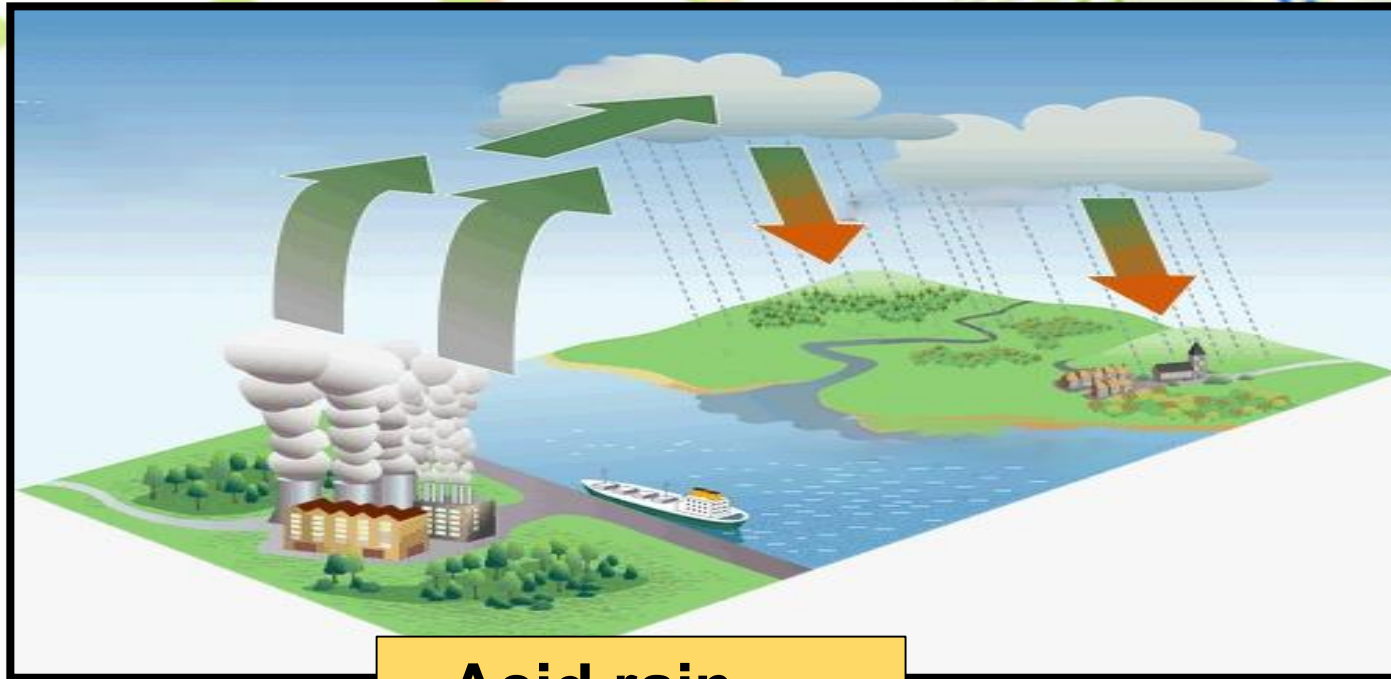
Effects of Air Pollution

a. When we breathe polluted air, harmful substances, present in the air, enter into our body and cause harmful diseases.

b. The harmful gases like sulphur dioxide and nitrogen oxide when mix with rainwater form dangerous substance called acids.

This rainwater fall on the earth as acid rain. This damages plants and buildings and affects the fertility of the soil.





Acid rain





Water Pollution

Waste water and garbage is often thrown into nearby water bodies. This deteriorates the quality of water. This is called water pollution. Any substance which alter the quality of water by polluting it is called water pollutant.





Water pollution





Causes of Water Pollution

The main causes of water pollution are:

- a. People throw garbage in the river and other water bodies.**
- b. People bathe and wash clothes in the river and other water bodies.**



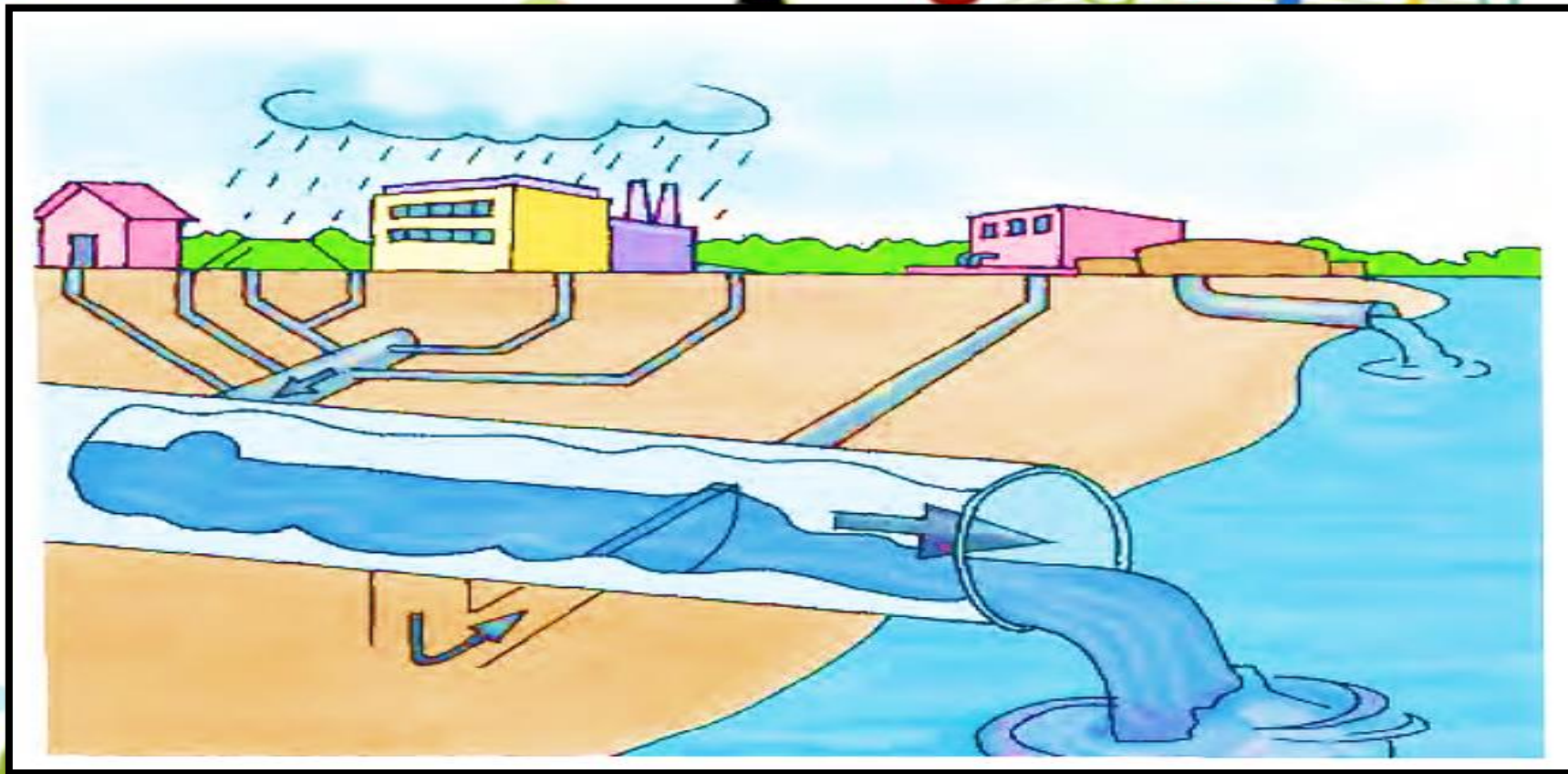




- c. Harmful chemicals from factories are mixed with the river water.**
- d. Sewage water mixes with the river water.**









e. Fertilizers and chemicals from the fields get mixed with the water.





Effects of Water Pollution

- a. Drinking polluted water without purifying may cause diseases like typhoid, diarrhoea, or dysentery.**
- b. Poisonous chemicals from factories infect water animals and plants.**
If we eat such infected animals and plants, we fall sick.





Land Pollution

Land is the habitat of human beings and many other plants and animals. Forests are not only the home for many animals but also provide us many useful products. Garbage is buried into the soil that leads to land pollution. There are several other causes of land pollution.





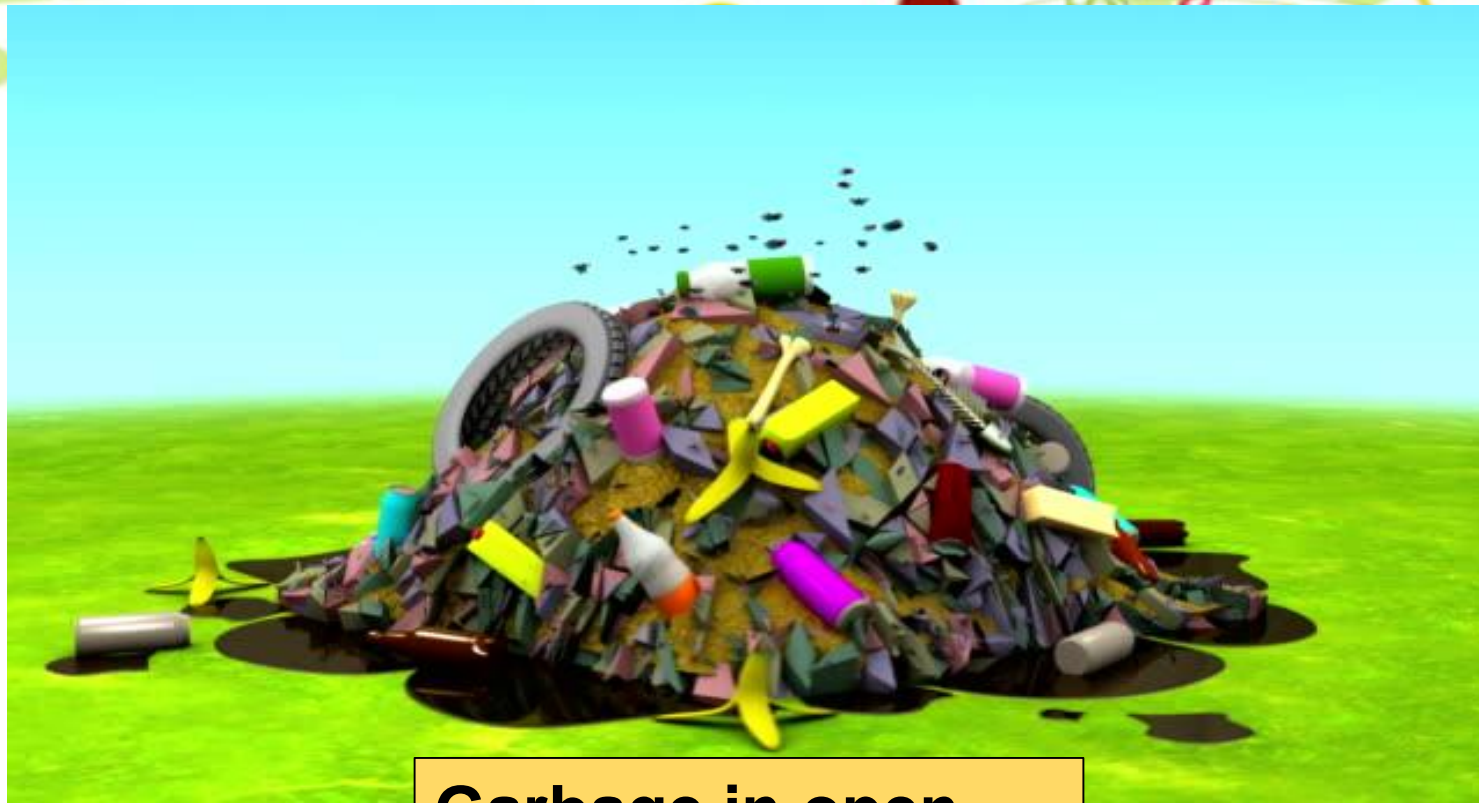
Land Pollution



Causes of Land Pollution

- a. Dumping garbage in open. This gives foul smell and is the breeding place for flies and mosquitoes.**
- b. Cutting of trees to meet the needs of the growing population leads to the deforestation.**





Garbage in open



Deforestation





c. To meet the needs of the growing population more factories are set up, that produce wastes, which leads to land pollution.





Effects of Land Pollution

- a. Because of deforestation, animals from forests move towards villages in search of food and shelter.**
- b. Deforestation leads to an increase in air pollution. Excessive cutting of trees also lead to soil erosion. Rainwater washes away the soil.**





c. This reduces the fertility of soil and makes it unfit for further cultivation.

d. Pollutants from the land seep through the soil and enter the ground – water. This pollutes the groundwater too.





BIODEGRADABLE AND NON-BIODEGRADABLE WASTES

Throwing wastes in the streets are bad for all of us. Harmful substances in the wastes are washed into the soil by the rain. Then they enter into the underground water and pollute our drinking water.





Burning of the wastes pollute the air. To keep the environment healthy these wastes should be treated. Wastes are of two types. These are the biodegradable and non-biodegradable wastes.







Biodegradable Wastes

All food wastes, grass, leaves, paper, excreta of animals are biodegradable wastes. These wastes will rot and mix with the soil. These wastes can be used to help the environment.





Non-biodegradable Wastes

These wastes include plastics, chemicals, metal and glass. These wastes do not rot. These wastes lead to pollution of the environment.





HOW TO SAVE OUR ENVIRONMENT?

- a. We should reuse or recycle non-biodegradable wastes like paper, plastics or metals as many times as possible. This will reduce pollution.**
- b. We should plant more trees. They reduce soil erosion and will clean air.**





- c. We should try to save natural fuel.**
- d. We should try to prevent deforestation.**
- e. The sewage water and the water from the factories should be treated, before releasing into the water sources.**





f. The biodegradable wastes can be changed into compost and used as manure or can also be used to make biogas.

g. Regular pollution check of the vehicles, helps to prevent air pollution.





Vehicle Pollution check



Check Your Knowledge

Fill in the blanks.

1. Burning the _____ pollutes the air.
2. The _____ buried in the soil leads to land pollution.
3. The impurities which pollute the environment are called the .





Fact File

- The growing population of the world is leading to production of more wastes and thus causing more pollution.
- Non-biodegradable waste remains in the environment for long time.





Things to Remember

- Air pollution leads to breathing problems and acid rains.
- Water pollution causes diseases and affects the water animals.
- Biodegradable wastes rot and mixes with the soil.
- We can help the environment by recycling, saving fuels, reusing things and planting more trees.

