

ENVIRONMENT

L.No	Title of Lesson	SKILLS	Activity
6	Environment	Self Awareness and Empathy Effective Communication Critical Thinking and Creative Thinking Problem Solving and Decision Making Coping with Stress	Awareness about environment degradation due to pollution

Summary

Pollution is the addition of any substance that makes the environment impure. These substances which cause pollution are called pollutants. Dust, dirt, garbage, chemicals and industrial wastes are common pollutants. There are four different types of pollution—air, water, soil and noise.

Air pollution is caused due to natural processes such as gas emissions from volcanoes, forest fires, dust with wind. It is also due to some human activities such as burning of household fuel, coal, exhaust from automobiles or smoke from factories. Air pollution can be **controlled** by using biogas as fuel, solar cooker, public transport and CNG vehicles.

Water pollution is caused due to domestic, industrial, agricultural wastes and oil spills. To **control** water pollution sewage water, industrial and residential wastes should not be thrown into rivers, ponds and other sources of water. Rain water can be harvested for future use.

Soil pollution is caused due to improper disposal of chemicals, metals and other wastes. Open defecation, urination and spitting also lead to soil pollution as dirt, germs and worms begin to breed in the soil. It can be **controlled** by recycling, composting and incineration.

Noise pollution is caused by automobiles, loud speakers, machines etc. It can be **controlled** by avoiding loud speakers, using silencer for vehicles and using horns, only when necessary.

Principal Points

- Human beings, animals, plants and environment are affected adversely by air, water and soil pollution.
- Pollution leads to various diseases in humans and animals.
- Industrial wastes are responsible for all types of pollution.
- Noise pollution affects human beings and animals.

Build Your Understanding

Pollution is created by both natural as well as man-made processes. Man-made processes can be controlled to an extent and it is the responsibility of every individual to control it.

What's Important to Know?

Air pollution causes

- Eye infections
- Decreased food production
- Poor visibility (smog)
- Respiratory tract allergies
- Rise in temperature
- Destruction of vegetation and natural beauty

Water pollution causes

- Water-borne diseases like cholera, typhoid, diarrhea, dysentery and gastroenteritis
- Skin diseases
- Degradation of aquatic life including aquatic plants and animals

Soil pollution causes

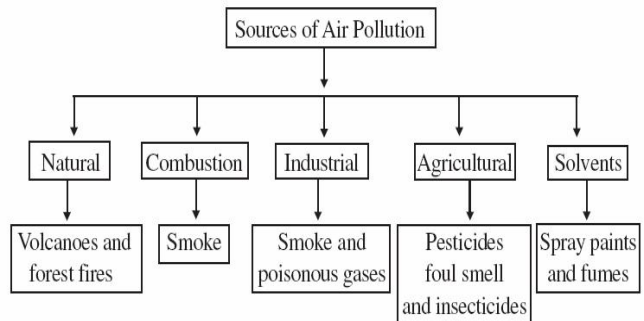
- Degradation of soil
- Sickness, if soil is consumed directly or indirectly or walked on with bare feet
- Lowering of food productivity and quality
- Absorption of chemicals by plants
- Sickness in humans and animals after consumption of these plants and vegetables.

Noise pollution causes

- Strained nerves
- Headache
- Mental disturbance
- Hearing impairments
- Damaged eardrums

Extend Your Horizon

1. Drinking of water from a nearby well is causing typhoid in your locality. What steps could you adopt to make this source of water safe for consumption?
2. Smoke makes your mother cough while cooking. Suggest two smokeless cooking devices.



Did You Know?

Smoke from cigarette

80% of the smoke from cigarette stays in atmosphere, which pollutes the air and in turn also gets inhaled by others.

Smoke from chullahs

Coal burning chullahs when used for cooking emit dangerous gases which affects the person cooking on the chullah. This can cause respiratory/lung impairments and diseases.

Industrial wastes

Chemicals from industries contaminate air, water and soil. These chemicals react with existing substances resulting in fatal acidic reactions which are harmful to humans, animals, plants and microorganisms thereby affecting the whole ecosystem.

Evaluate Yourself

Composting can be done at home. Manure can be used for plants in your garden at home. Composting helps in reducing the garbage at home and also utilising natural wastes.

Maximize your marks

Learn the definitions mentioned in the chapter. A cycle or diagram can help in understanding and memorising various processes.