



CLASS: 5<sup>th</sup>  
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SUBJECT: Science  
LESSON- L-7: Pollution

### I. Key words:

- |                     |                   |
|---------------------|-------------------|
| 1. contamination    | 11. jaundice      |
| 2. pollutants       | 12. diarrhoea     |
| 3. fumes            | 13. pesticides    |
| 4. methane          | 14. deforestation |
| 5. kerosene         | 15. synthetic     |
| 6. asthma           | 16. biodegradable |
| 7. hydroelectricity | 17. thermocol     |
| 8. aquifers         | 18. aluminium     |
| 9. stagnant         | 19. anxiety       |
| 10. dysentery       | 20. compressor    |

### II. Pre activity:

Name the different types of pollutions and give examples of each of it.

### III. Give two examples for each of these:

- Types of pollution.  
Ans: land, air, water, noise.
- Activities causing land pollution.  
Ans: pesticides, landfills, deforestation.
- Health effects of water pollution.  
Ans: communicable diseases.
- Effects of air pollution.  
Ans: global warming, acid rain.
- Kinds of waste.  
Ans: biodegradable, non-biodegradable.

#### **IV. Give reasons for each of these:**

1. Humans are the cause of all kinds of pollution.

Ans: Humans set up factories that release harmful gases in the air. Humans throw harmful substances such as chemicals and plastics in the water bodies and on land. Hence, they pollute land and water. They also cut down trees to make paper, furniture and buildings. Humans also cause noise pollution by playing loud music, honking, etc. Hence, humans are the cause of all kinds of pollution.

2. We should not play loud music.

Ans: Loud music causes noise pollution that has many harmful effects on our health. It discomforts our ears and causes irritation, disturbance to sleep and we can even have loss of hearing in some cases.

3. Destruction of forests leads to global warming.

Ans: Trees in forests absorb carbon dioxide that causes greenhouse effect. The excess greenhouse effect leads to global warming. Destruction of forests, increases the amount of carbon dioxide in the air that leads to global warming.

#### **V. Answer the questions in brief:**

1. What are pollutants?

Ans: Pollutants are substances that pollute the environment.

2. What is acid rain?

Ans: When air mixes with poisonous substances, it comes down as acid rain.

3. What is the greenhouse effect?

Ans: The trapping of heat from the sun by the gases in the atmosphere and not allowing it to escape, leads to increase in the Earth's temperature. This is known as the greenhouse effect.

4. What is biodegradable waste?

Ans: Biodegradable waste comes from plants and animals. It mixes with the soil without harming the environment. Food waste, peels of fruits and vegetables and paper are biodegradable wastes.

5. How do plants help in preventing noise pollution?

Ans: Plant and trees act as sound absorbers.

## **VI. Answer the questions in detail:**

1. Write a note on the effect and prevention of air pollution.

Ans: Air pollution is very harmful for the health of living beings. Inhaling polluted air leads to breathing problems and causes diseases like asthma and lung cancer. Animals and plants also fall sick when the air is polluted. When harmful substances and gases increase in a particular place, the temperature of that place rises, which affects the climate.

One of the major effects of air pollution is acid rain. Air pollution thins down the ozone layer that protects us from the harmful rays of the sun.

Ways of preventing air pollution are:

- 1) Using renewable sources of energy such as windmills, hydroelectricity plants and solar energy that do not cause any pollution.
- 2) Laws are being enacted to make factories and industries more responsible about the pollutants they release.
- 3) Car manufacturers are designing vehicles that are more energy efficient and cause less pollution.
- 4) Diesel and petrol are being replaced with CNG (compressed natural gas) as it does not give out smoke.
- 5) Vehicle owners should go for a regular pollution check to ensure that the emission of gases remain within the limits set by laws.
- 6) We must stop bursting firecrackers during festivals.
- 7) Recycling and reusing, and planting trees go a long way in preventing air pollution.

2. Describe some sources of water pollution.

Ans: Water pollution occurs when pollutants are released into water bodies.

- 1) These pollutants could be chemicals from factories, sewage, waste materials from fertilizers or even garbage.
- 2) The seas and oceans have a threat from oil spillage from ships. The oil does not mix with the water and harms the aquatic life, causing death in most cases.
- 3) People bathe, wash clothes and utensils, and also bathe their cattles in water bodies like rivers, lakes and ponds.
- 4) The dirt and chemicals from the soap gets mixed up with the water, causing pollution. The solid wastes dumped in water also causes water pollution.
- 5) People often throw trash into water, thereby adding to water pollution.

3. Mention some effects of land pollution.

Ans: 1) When the soil gets polluted, it affects all living beings. Crops growing in it and creatures living in it will not be able to survive.

- 2) Polluted soil can cause respiratory diseases due to breathing in of dust.
- 3) Fruits and vegetables grown in polluted soil cause illnesses.
- 4) Landfills and garbage dumps breed rats and insects that cause diseases and also spread bad odour.

5) Plastic bags and sheets clog drains. A dump of trash or garbage on the road or anywhere destroys the beauty of a place.

4. How can you prevent water pollution?

Ans: We should follow laws for pollution control.

1) Sewage must be treated before it is released into water bodies.

2) We must use environment-friendly cleaning liquids.

3) We should not use too much pesticides and chemicals.

4) We must not pollute water by bathing or washing clothes and utensils in rivers, lakes or ponds.

5) We should spread awareness about keeping water bodies clean.

### **VII. Out of the box:**

1. Forests are considered as our lifelines. Justify the statement.

Ans: Forests maintain the balance between gases like carbon dioxide and oxygen.

They also bring rains and provide shelter to many animals. Forests provide us with many important items like wood, gum and medicines. Forests also help in maintaining food chain. They reduce pollution. Hence, forests are our lifelines.

### **VIII. Post activity:**

Write in short about the biodegradable and non-biodegradable wastes.

Subject Teacher

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