Plastic And Environment LR

Plastic and environment. Plastic can be seen everywhere. From household cleaners to soft drinks they are used in various articles that we use in our daily lives.

Plastic is convenient to use however it has certain disadvantages. Most of the plastics are non-biodegradable. When discarded in the soil they remain in their present state as they do not decompose for thousands of years.

This is due to the structure of plastic. Plastic is polymeric in nature. A polymer is a long chain of small chemical units called monomers joined by a chemical bond.

Strong chemical bonds do not break upon action of microorganisms like bacteria making the plastic resistant to natural decomposition processes. Thus improper disposal of plastic goods poses a threat to the environment. Plastic waste such as bags can choke drains which in turn results in an overflow of waste water providing an ideal setting for breeding of insects leading to diseases.

When disposed of in soil plastics block the pores in the soil thereby hindering the seepage of water that leads to groundwater recharge problems. Plastics are made of toxic chemicals. When burnt plastics release dangerous chemicals which is sulfur dioxide, dioxins, and heavy metals like lead as well as particulates.

These emissions are known to cause respiratory problems and affect the human immune systems causing disease like cancer. The dumping of plastic goods in water poses a threat to aquatic life. In water aquatic animals ingest plastic bags mistaking them for food.

Plastic being indigestible leads to the death of these marine animals. The problems caused by plastic are serious and we need to follow the 4R principle of refuse, reduce, reuse, and recycle the plastics. Summary.

Plastic is not environmentally friendly. Improper disposal of plastic goods poses a threat to the environment. We need to follow the 4R principle of refuse, reduce, reuse, and recycle the plastics.

Summary:

Plastic and the Environment

Plastics are widely used in daily life, from household items to packaging materials. However, **plastics are non-biodegradable**, meaning they do not decompose for thousands of years. This is because **plastics are made of polymers**, which have

strong chemical bonds that **cannot be broken down by bacteria** or other microorganisms.

Environmental Problems Caused by Plastic:

1. **Soil Pollution**: Plastics block the pores in the soil, preventing water seepage and groundwater recharge.
2. **Water Pollution**: Plastic waste in water bodies harms **aquatic animals**, as they mistake plastic for food, leading to their death.
3. **Air Pollution**: When burned, plastics release harmful **toxic chemicals** like sulfur dioxide and lead, which can cause respiratory diseases and even cancer.
4. **Drainage Blockage**: Plastic bags clog drains, leading to waterlogging, insect breeding, and the spread of diseases.

To **reduce plastic pollution**, we must follow the **4R Principle**:

- **Refuse** unnecessary plastic use.
- **Reduce** the amount of plastic consumption.
- **Reuse** plastic items instead of discarding them.
- **Recycle** plastic waste properly.

Quiz: Plastic and the Environment

1. Why is plastic harmful to the environment?

✅ a) It is non-biodegradable and does not decompose easily
❌ b) It improves soil fertility
❌ c) It absorbs water and helps groundwater recharge
❌ d) It is digested by marine animals

2. What happens when plastics are burned?

✅ a) They release toxic chemicals that cause respiratory diseases
❌ b) They turn into useful fertilizers
❌ c) They release pure oxygen into the air
❌ d) They become biodegradable

3. What is the main reason plastic pollutes soil?

✅ a) It blocks soil pores, preventing water seepage
❌ b) It turns into compost over time

✗ c) It helps in plant growth

✗ d) It dissolves in water and disappears

4. What does the 4R principle stand for?

☑ a) Refuse, Reduce, Reuse, Recycle

✗ b) Rebuild, Replant, Recover, Renew

✗ c) Remove, Reduce, Restore, Reuse

✗ d) Refine, Recycle, React, Reduce