

**Subject:** Basic science

**Topic:** Soil pollution

**Class:** JSS 2

## **SOIL POLLUTION**

### **DEFINITION OF SOIL POLLUTION**

Soil pollution is defined as the situation whereby a soil contains waste substances as a result of human **activities in amounts which are harmful to human, animals and crops.**

Soil is an important component of the environment which humans and animals live. Soil is the major source of the materials used for the sustenance of our life, food and natural resources. Therefore, it should be properly cared for and protected.

### **SOURCES OF SOIL POLLUTION**

Those harmful substances that pollute the soil are referred to as **pollutants**. They affect the quality of our soil.

They include;

1. Discarded objects lying freely on the ground such as metal materials from old vehicles, plastics, broken bottles etc
2. Industrial waste and chemicals deposited in the soil. Eg. lead compound that contaminate the soil.
3. Refuse and litters containing different organic and inorganic matter.
4. Glass, plastics and pesticides.

### **EFFECTS OF SOIL POLLUTION**

1. Industrial chemicals eg. lead sulphate produced by industries that make car batteries may contaminate crops and others, if these crops are eaten, they may cause health hazards.
2. Discarded materials on the land make it untidy, unattractive and usually unsafe for human beings. Example when you step on rusty metallic materials, it may cut the feet which may lead to or cause tetanus which is a killer disease.
3. Some chemicals eg. engine oil etc kill micro-organism in the soil, destroy the plants as well as the soil structure and fertility.
4. During rainfall, run off water could pass through refuse dumped areas and flow into rivers.
5. Occupy much land space, obstruct land use for farming, block air flow, may be unsightly and some items may decay and smell.

### **COTROL OF SOIL POLLUTION**

1. Sort the refuse to remove items that can be recycled eg. bottles, metals, plastics and tins.
2. Regular environmental sanitation should be undertaken.
3. Legislation by government to prevent people from carelessly discarding objects and materials in unauthorized places.
4. Some other dry waste eg. paper and dry leaves can be burnt in an incinerator.

### **HOMEWORK**

1. Write down five examples of soil pollutants.
2. What are the effects of soil pollution on:
  - a. The environment
  - b. Human beings