

Importance of Soil

Lesson 2

Take note of the importance details:

- Biotic Factors are living things such as plants and animals.
- Abiotic factors are non-living things such as different matter(rocks/mountains) and energies(minerals/sunlight/gas)
- In urban areas land is used for houses, buildings, and infrastructures.
- In rural areas land is used for farming.

Soil is important in many ways:

1. Home to many terrestrial animals.
2. Herbivore animals depends on plants for food.
3. Humans and animals depend on plants for oxygen and vice versa, plants need carbon dioxide that is release by humans and animals.

Without the soil and plants, people and animals will die.

Sandy soil	Silt soil	Heavy clay soil	Loam soil
Carrots grows easily in sandy soil.	Rich in nutrients and has good water-retaining capabilities.	Compacts easily and hinder the movement of air and water.	Best type of soil for growing vegetables as it contains the right amount of nutrients, moisture, and organic matter.
Eggplant requires high temperatures making it thrive in dry soil.	Good soil for planting coffees	Potatoes can push through its roots in heavy, moisture-rich clay soils because of its large roots.	Vegetables that is best to grow here are corn, cucumber, garlic, okra, onions, squash.
Watermelon also prefers sandy soil as it requires less water.		Leafy vegetables like cabbage and lettuce germinate well.	Plants: oranges and strawberries, and lemons
		Rice, wheat, and oats need clay soil in order to grow.	

Read wrap up on page 183.

Write **true** if the statement is correct, and **false** if it is wrong.

- _____ 1. Plants, animals, and humans interact with the soil.
- _____ 2. Plants give off carbon dioxide which animals and humans breathe in during respiration.
- _____ 3. Soil serves as habitat to many terrestrial animals, including humans.
- _____ 4. Soil provides water and nutrients to plants in order that they may grow and live.
- _____ 5. All plants can grow on all types of soil as long as there is sunlight.

Challenge Yourself

A. Read the questions carefully and write the letter of the best answer on the space provided before each number.

- _____ 1. Which layer of Earth is composed of both the solid and liquid surfaces?
 - a. crust
 - b. mantle
 - c. inner core
 - d. outer core
- _____ 2. Which forces of nature help in transforming the rocks into soil?
 - a. wind and water
 - b. wind, water, and plants
 - c. wind, water, and animals
 - d. wind, water, plants, animals, and humans
- _____ 3. What is soil made of?
 - a. rock particles
 - b. minerals and nutrients
 - c. humus
 - d. all of these
- _____ 4. Which layers of soil are not suitable for growing plants?
 - a. topsoil and subsoil
 - b. topsoil and bedrock
 - c. subsoil and bedrock
 - d. topsoil and parent rock
- _____ 5. Which is true about the characteristics of soil?
 - a. The size of soil particles determines the texture of soil.
 - b. The color and smell of the soil depend on the particles present in it.
 - c. The spaces between the particles of soil determine its water-holding capacities.
 - d. All of the above

- _____ 6. Which type of soil feels rocky and coarse, making it suitable as construction material?
- a. sand
 - b. silt
 - c. loam
 - d. clay
- _____ 7. Which is **not true** about soil?
- a. Soil is a habitat for many plants and animals.
 - b. Soil provides materials for plants to survive.
 - c. Soil receives light energy for the plants.
 - d. Soil and plants interact in the environment.
- _____ 8. In which type of soil do vegetables and fruits grow best?
- a. sand
 - b. silt
 - c. loam
 - d. clay
- _____ 9. Watermelon requires less water. In which type of soil will it grow best?
- a. sand
 - b. silt
 - c. loam
 - d. clay
- _____ 10. Most grain crops, especially rice, wheat, and oats, need heavy, compact, and moisture-rich soil. Which type of soil is best for grain crops?
- a. sand
 - b. silt
 - c. loam
 - d. clay
- _____ of the following types of soil.