

Soil Study Guide

IMPORTANT CONCEPTS

- Soil is important because **it provides support and nutrients necessary for plant growth**. Without soil, we could not grow most crops!

Nutrients are materials that plants and animals need to live and grow.

- Soil is created over **many years** by:

1. Water (rivers and streams smooth rocks and carry pieces to new places)

2. Weather (water freezes in rocks causing them to break, rain washes away soil, and wind blows sand onto rocks and breaks off pieces of rock)

3. Living things (humans, animals, and plants can break apart rock to form soil)

- The breaking down of rock and soil is called **weathering**. The movement of soil from one place to another is called **erosion**.

- Soil is **a natural resource** and **takes a long time to form**, so it should be conserved. We can conserve soil by preventing erosion and avoiding polluting the soil.

Natural resources are materials that come directly from the Earth and are useful to humans, such as wood and water.

Conserve means to save and protect.

WHAT IS SOIL MADE OF?

1. Rock

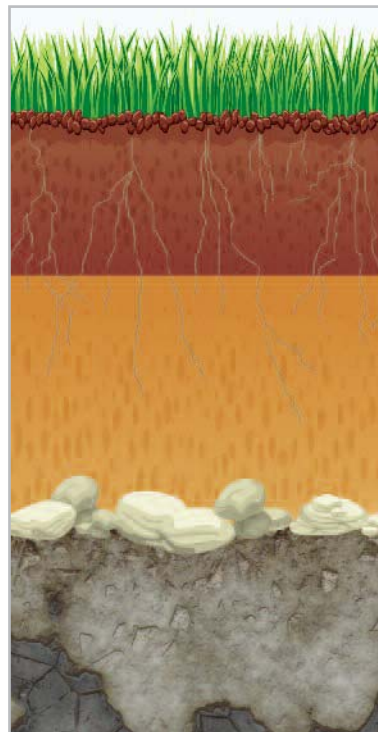
2. Clay- made up of tiny particles of soil that hold water well and provide nutrients

3. Silt- made up of very small broken pieces of rock. Particles are bigger than clay but smaller than sand.

4. Sand- made up of small grains of worn-down rock. Sand has very few nutrients and does not hold water well.

5. Humus- made up of decayed matter (decomposing plants and animals). Humus adds many nutrients to the soil and is found in topsoil.

LAYERS OF SOIL



Ground Cover

contains leaves, twigs, and animal waste

Topsoil

- A natural product of subsoil and bedrock
- Made of humus which adds nutrients
- Plants grow here, so there are often many roots

Subsoil

The deep layer of soil that forms over a long period of time

Bedrock

- The layer of soil that is solid rock
- It has also been formed over a long period of times