

SOIL: IT'S MORE THAN JUST DIRT!



Name: _____

Soil is the loose material that covers much of the Earth's surface. The process of **weathering** breaks down rocks and helps to produce soil over hundreds of years.

Soil is made up of bits of rocks and minerals, humus, air, and water. **Humus** is the decayed remains of once-living things. The more humus a soil has, the more nutrients it has. Soils with a lot of humus are often very dark in color.

While all soils are made of the same things (weathered rocks and minerals, humus, air, and water), there are different types of soil. Soil types can be identified by observing their different properties, such as particle size, color, texture, and water capacity (or how well it holds water)

WHAT IS SOIL?

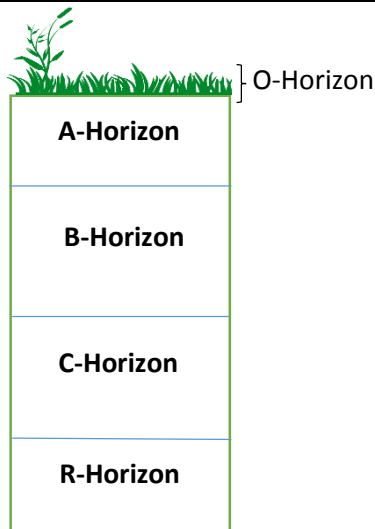
O-Horizon is the very top organic layer.

A-Horizon (Topsoil) is the very top layer. It has small dark particles and a lot of humus. This is the best layer for growing plants.

B-Horizon (Subsoil) is the layer of soil right below the topsoil. The particles are larger and it is lighter in color. There is less humus.

C-Horizon is weathered parent material. This can be rock or sediments.

R-Horizon (Bedrock) is the bottom layer. It is a thick layer of unweathered, solid, rock.



LAYERS OF THE SOIL

Soil Formation

There are five factors that contribute to the creation of soil in a region.

Parent Material is the starting material of soil. It is made of rock or sediments that weathers and becomes soil.

Climate is the average weather in an area and affects the rate a parent material will weather. Warm, wet climates can produce soil rapidly because the rain and warm temperatures can maximize weathering. Weathering also increases in locations where there is freezing and thawing.

Topography is the shape and steepness of a landscape. The topography of an area determines what happens to the water when it reaches the soil surface.

Biota are all of the organisms that live in a region. Biota help speed up the process of soil formation.

Time –Soil formation is a constant but slow process. Soil that is 1,000 years old is considered young soil. New soil forms on top of older soil to form layers.

1. Define soil? _____
2. _____ is the bottom layer of soil. It is a thick layer of unweathered rock.
3. What factors contribute to soil formation?
 - a.
 - b.
 - c.
 - d.
 - e.
4. Explain what factor you think is the most important? Why? _____

5. Name and describe the different layers of soil.
 - a.
 - b.
 - c.
 - d.

Questions