Introduction to Soil

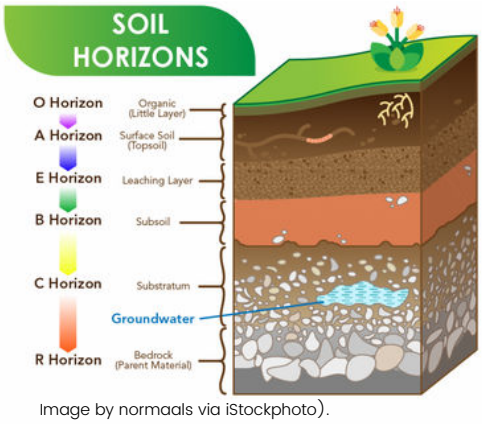


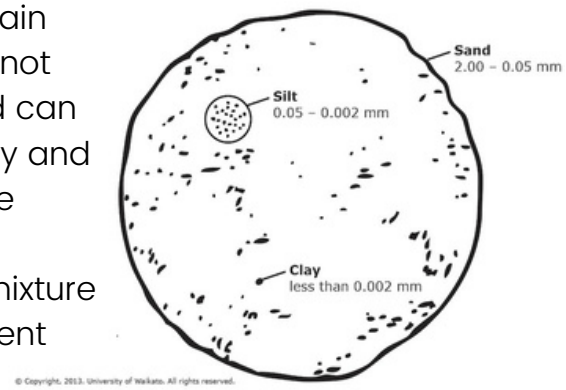
Image by normaals via iStockphoto).

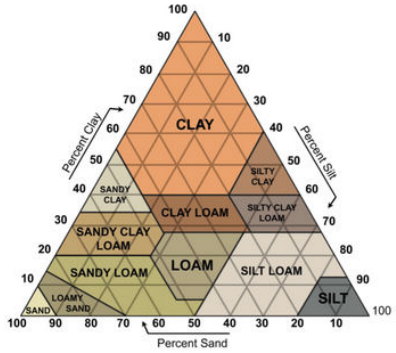
Soil is made up of four different things. They are rocks, humus, air, and water. Rocks are often broken up by wind, water, and changing temperatures causing them to become very small. These tiny pieces of rock form a part of soil.

The best soil for growing plants is soil that has a lot of humus, water, and air. A good type of soil for growing plants would be soil found in forests and farms.

Humus is the O layer of soil made up of dead plants and animals. It is often found near the surface of the ground. Some soils are rich in humus and some are not. Air and water live in the spaces in soil. Insects and roots go through soil creating holes and spaces for air and water to move. If soil has no spaces for air and water it won't be as good for growing.

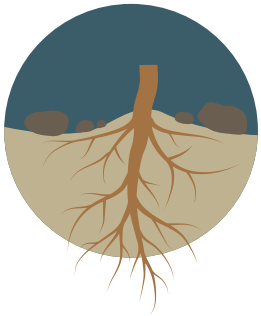
There are rock pieces often found in soil. The three main kinds are sand, silt, and clay. Sand is loose and does not hold water well. Silt holds water, but it is very light and can be blown away easily. Clay holds water, but it is heavy and may not be the best for growing. A mixture of all three types of rock is called loam and provides the type of nutrients plants need. Loam would be the best rock mixture found in soil for growing. Soil with higher carbon content has a darker brown colour.





Many animals live in soil. Insects lay their eggs in soil, and many small creatures live on the top of the soil eating the dead pieces of plants and animals. Larger creatures like groundhogs and chipmunks also make their homes in soil by burrowing deep tunnels.

Sometimes soil can lose its shape through a process called erosion. Problems are caused when soil breaks down due to time, water, and wind. Soil can often be saved from erosion when there are many tree and plant roots in it. Roots from trees and plants work to hold soil together.



QUILLS
Queen's University Indigenous Land-Based Learning STEM
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Soil: Review

Using sentences, answer the following questions based on the information given.

1. The four parts of soil are:

- _____
- _____
- _____
- _____

2. Humus is:

_____

_____

_____

_____

3. Explain who lives in soil and what they do:

_____

_____

_____

4. Explain the type of rocks you find in soil?

_____

_____

5. What prevents erosion from happening?

_____

_____