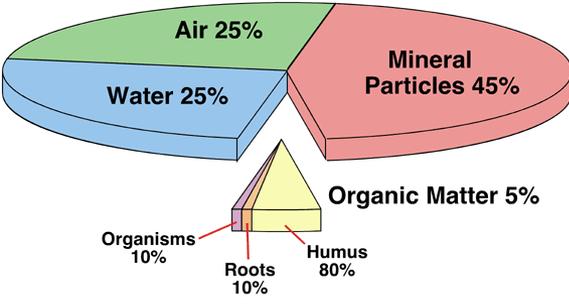


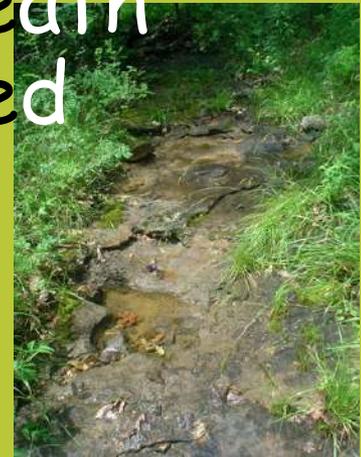
Soil Formation and Composition

Chapter 6 Section 2



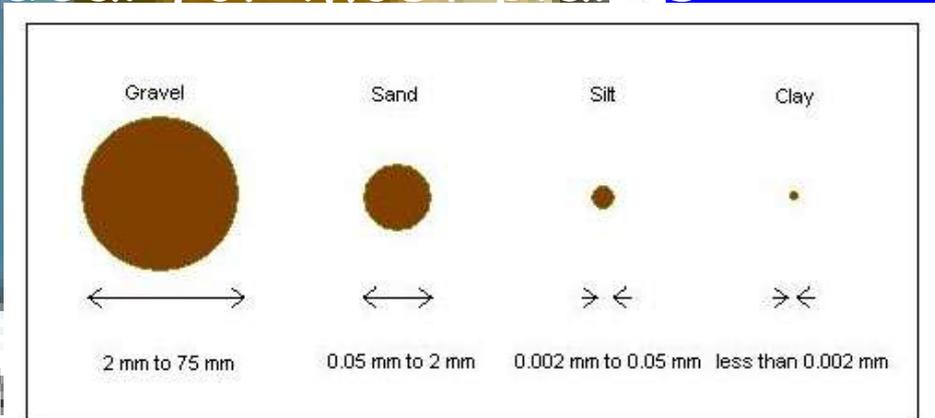
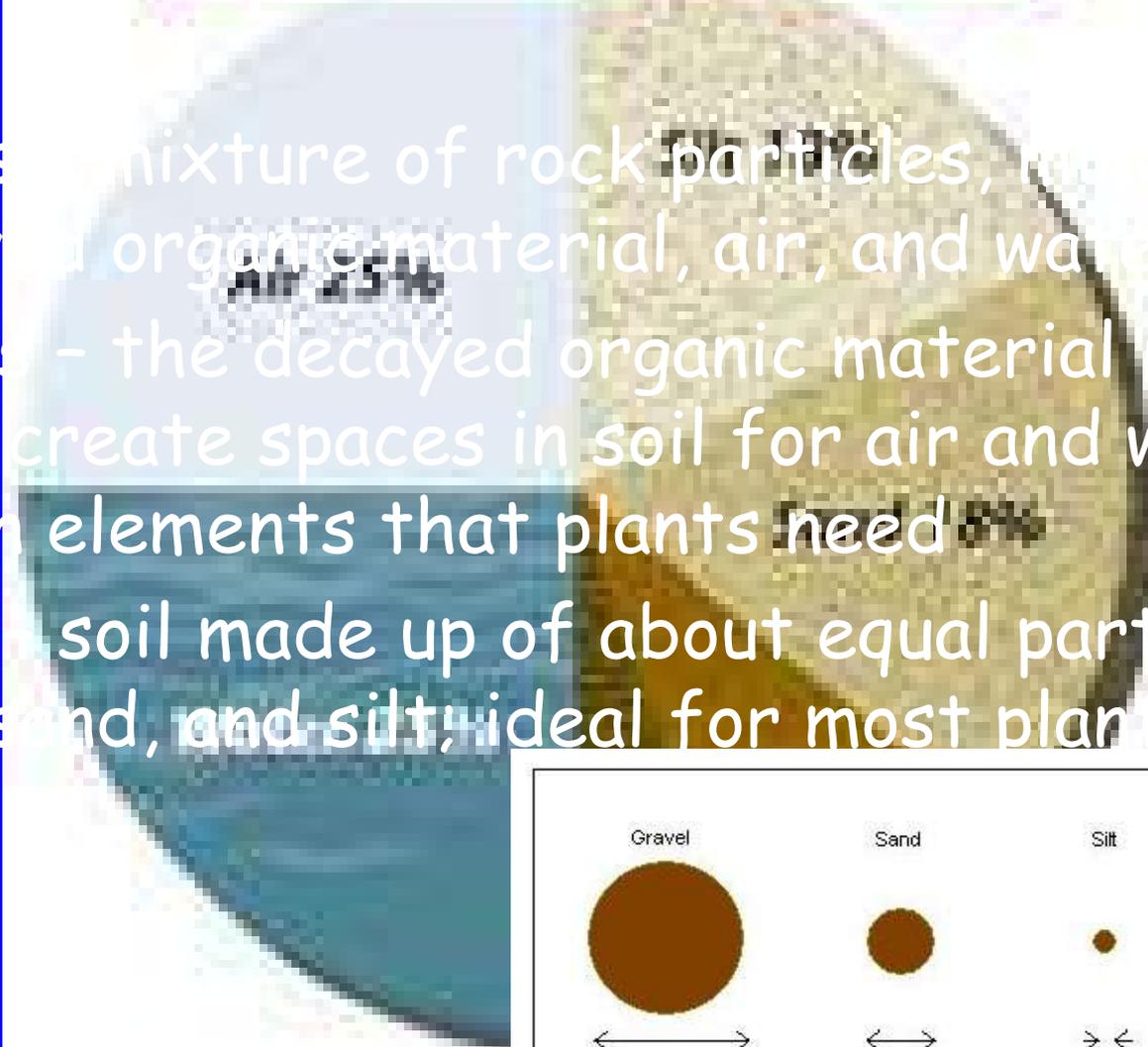
Soil Formation

- Soil - the loose, weathered material on Earth's surface in which plants can grow
- How is soil formed? - Soil is formed as rock is broken down by weathering and mixes with other materials on the surface
- Bedrock - solid layer of rock beneath the soil, soil is always being formed whenever it is exposed



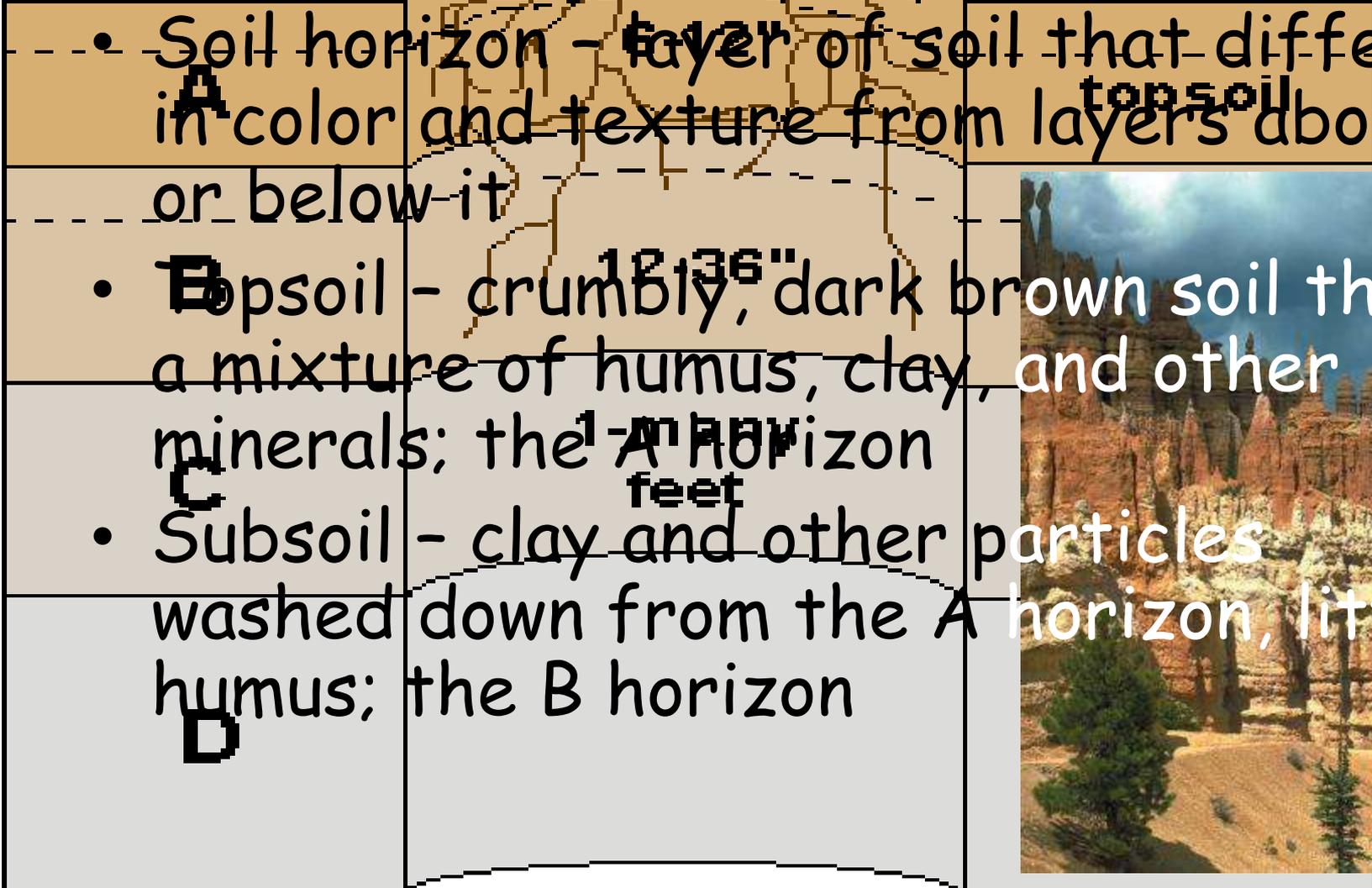
Soil Composition and Texture

- Soil is a mixture of rock particles, minerals, decayed organic material, air, and water
- Humus - the decayed organic material in soil; helps create spaces in soil for air and water; rich in elements that plants need
- Loam - soil made up of about equal parts of clay, sand, and silt; ideal for most plants



Organic matter

Soil Horizons



• Soil horizon - layer of soil that differs in color and texture from layers above or below it

• **A** Topsoil - crumbly, dark brown soil that's a mixture of humus, clay, and other minerals; the **A** horizon

• **C** Subsoil - clay and other particles washed down from the **A** horizon, little humus; the **B** horizon

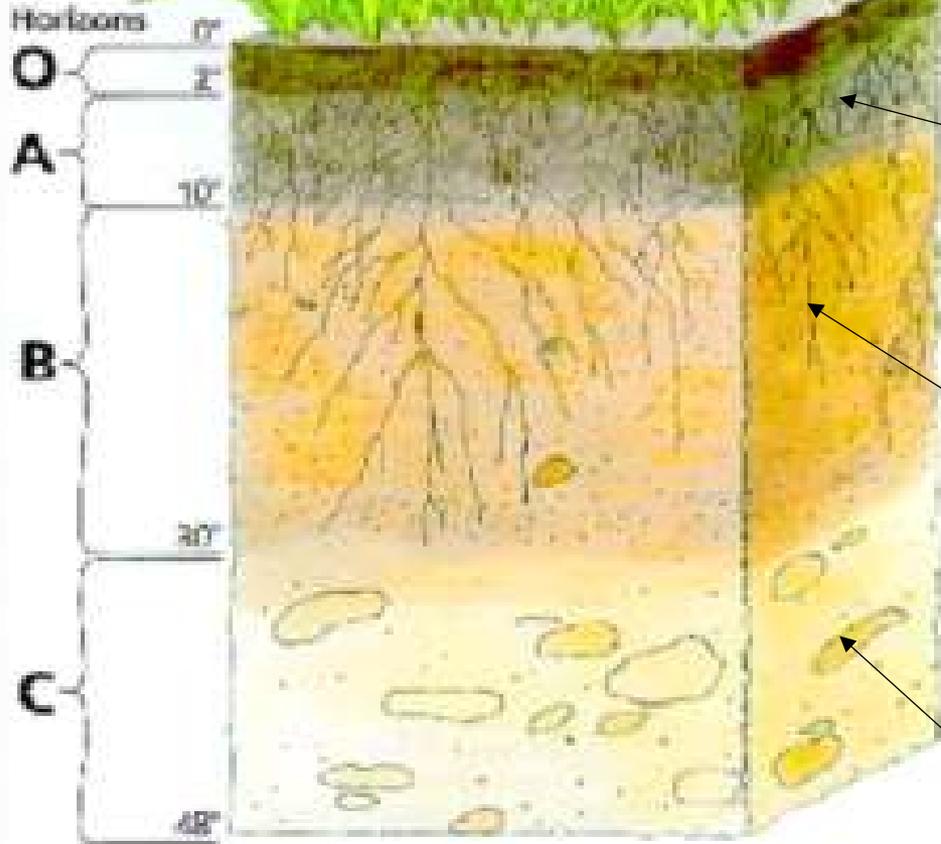


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Life in Soil

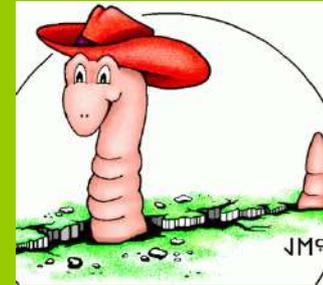
- Some soil organisms mix the soil and make spaces in it for air and water. Other soil organisms make humus, which makes soil fertile.
- Litter - the loose layer of dead plant leaves and stems on the surface of the soil
- Decomposers - organisms that break down dead organisms and digest them

A Soil Profile



Chipmunks live in dens in the soil and search the litter for seeds and nuts.

Plant roots break up the soil and hold it in place.



Earthworms break up the soil, making it easier for plant roots to spread and for air and water to enter the soil.



Bacteria are decomposers that break down animal and plant remains and wastes.

Soils of North America



FAO SOIL GROUPS	
1	Acrisols
2	Albeluvisols
3	Andosols
4	Arenosols
5	Calcisols
6	Cambisols
7	Chernozems
8	Cryosols
9	Durisols
10	Fluvisols
11	Gleysols
12	Histosols
13	Kastanozems
14	Leptosols
15	Lixisols
16	Luvisols
17	Nitisols
18	Phaeozems
19	Planosols
20	Podzols
21	Regosols
22	Solonchaks
23	Solonetz
24	Vertisols
	Glaciers