Soil Notes

What Is Soil?

- Soil is "dirt"!
- It is made up of four things:
 - 1. **Rock**
 - 2. Water
 - 3. Air
 - 4. Organic matter

Properties of Soil

- Soil can have different properties.
- The color depends on the minerals in the soil.
- There are three main "grain sizes" that are in soil: clay, silt, and sand.

Clay

- Clay is the smallest particle.
- It is <u>difficult</u> to grow things in soil that has mostly this kind of particle because it is difficult for water to drain through.

Silt

- Silt is a <u>medium</u> sized particle.
- Soil with mostly this kind of particles holds water well and is great for growing things.

Sand

- Sand is the <u>largest</u> grain size.
- It is typically <u>dry</u> because water can easily drain though.

Which Is The Best?!

- <u>Loam</u> soil contains a fairly even <u>mix</u> of all three grain sizes: clay, silt, and sand.
- Plants grow best in loam.

How Does Soil Form?

- Soil is formed through weathering.
- Weathering is when rocks are broken down by one of the following <u>five</u> ways: wind, water, temperature change, chemicals, or by living things.

Weathering

- Weathering can be <u>physical</u> or <u>chemical</u>.
- <u>Physical</u> weathering does not change the make-up of the rocks. Instead, it only breaks them down.
- <u>Chemical</u> weathering is caused by a chemical reaction between the minerals in the rocks and the chemical doing the weathering.
- The pieces of rock that are broken down from weathering are called sediments.
- <u>Erosion</u> is when rocks, soil, sediments, or other earth materials are moved from place to place.
- When sediments end up in a new place, it is called <u>deposition</u>. An example of this is the Mississippi River Delta.