Stratigraphy

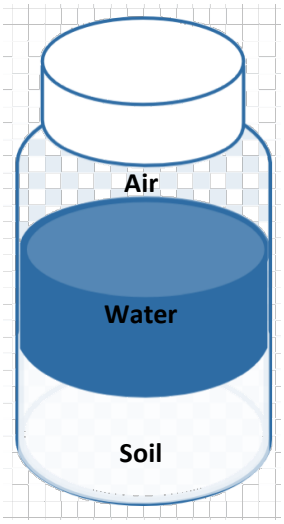
Investigate the science of soil layers, like archaeologists and geologists

When wind and water move soil (dirt), the particles and grains are neatly sorted by size. The heavy grains drop out first, and then the smaller grains fall out when the wind or water was slower and calmer.

For this experiment, you will need two jars with lids and two different soils (dirt) that you are curious about. It is a good experiment to do with a family member or friend. Note to adults: If two jars are not available, two taller **clear** cups can be used and the soil stirred, rather than shaken.

1. Fill 1/3 of each jar with soil (dirt). It is best to have two different soils.
2. Add water to the 2/3 level of each jar.
3. Close the lids tight on the jars. **Shake well!**

Note to adults, if using cups instead of jars, stir the soil into the water.



4. Let the jars sit until the next day.
5. Observe the layered soil in the jar.

Use the space to write your thoughts to the questions.

What do you see on the bottom of the jars? Big or small grains?

What do you see in the other layers?

Do you see material floating on the top of the water? What is it?

How are the two jars different?

Draw what you see in your jars? By looking at the layers you see, you are looking at the stratigraphy of the soils in your jars.

Write a story to tell what you think is going on in your jars.

What questions do you have?

With an adult's permission, take a walk in an arroyo (or dry stream). Look at the sediments in the walls and the rocks and sand you are walking on. Do you see big rocks that are evidence of fast-moving water? Do you see small grains that would tell you there was slower moving water? Keep looking and thinking about what you see. You are now learning how to be an earth scientist!!