



## Soil Layers Jar Activity

Archaeologists spend lots of time studying dirt! It can tell them all kinds of important things like how long it has been there and what activity used to take place there. Dirt, or soil, forms into layers called **strata**, and strata is really important for piecing together information about any artefacts that might be found there.

While archaeologists have lots of special training on digging for artefacts, you don't have to be an archaeologist to discover soil layers at your own house!



### All you need is:

1. A glass jar with straight sides
2. Water
3. A good scoop of dirt!
4. A stirring stick

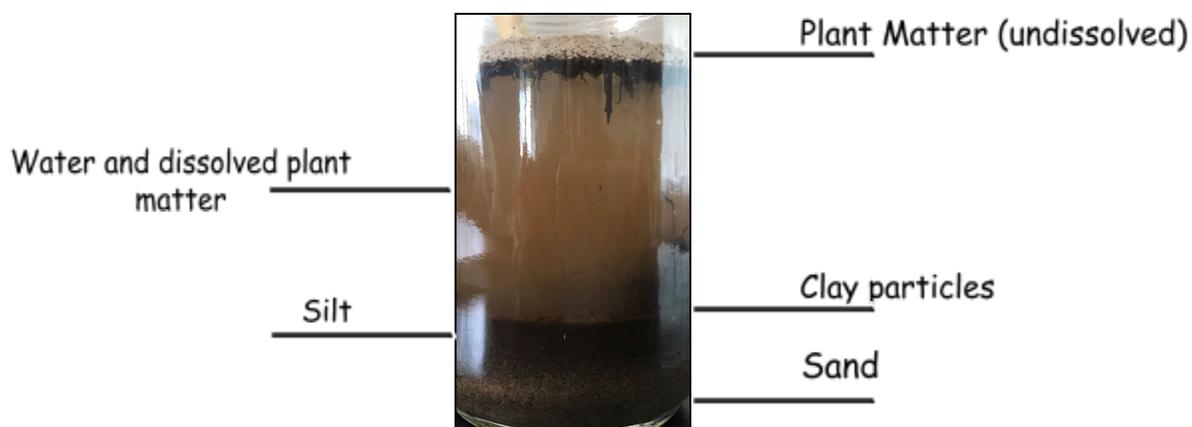
### Here's what to do!

**Step 1:** Fill  $\frac{1}{3}$  of the jar with the dirt.

**Step 2:** Top up the rest of the jar with water - leave some room at the top of the jar.

**Step 3:** Stir the mixture vigorously. Leave it for at least 1 hour.

**Step 4:** Come back! You'll notice that your dirt has separated into distinct layers.





## Extension Activity: Analyzing Soil Composition.

Now that you have seen the different layers of soil, you can analyze what percentage of each soil type is in your yard!

**Step 1:** Measure the height of the entire mixture (ie 10 cms)

**Step 2:** Measure the height of EACH layer of soil and record it (ie bottom layer/sand = 2 cms)

**Step 3:** Divide the height of the entire mixture by the height of one of the soil types, and then multiple by 100. (ie  $10/2 \times 100 = 20\%$ ).

Great job! You've gained an important archaeological skill!

### Ontario Curricular Connections

Gr 7:

A3. Demonstrate an understanding of significant patterns in Earth's physical features and of some natural processes and human activities that create and change those features

A3.2 Describe some key natural processes and human activities (e.g., tectonic forces, weathering and erosion, deposition, glaciation, mining, land reclamation projects) that create and change landforms

