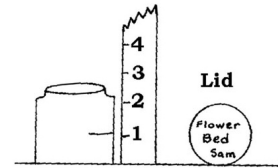


What is My Soil? Instruction Sheet

In this exercise, you will be testing a soil sample to determine its texture. Follow the steps below.

1. Place your jar on the table and, standing your ruler against the side of the jar, draw a horizontal line on the jar one inch up from the bottom. Pour soil from your sample up to the line. Write the location from which you obtained the sample on the jar lid.



2. Fill the jar halfway with water and screw the lid on tightly. Holding the jar securely, shake the jar up and down to completely mix the soil and water. Then, place the jar on a level surface where it will not be disturbed for the next day.

3. Answer questions 1 and 2 on the “What is My Soil?” activity sheet. Go over the soil triangle with your teacher and learn how to use it.

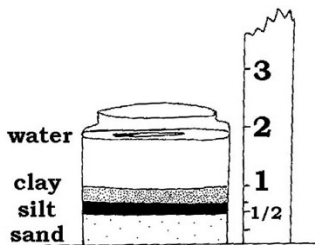
4. After 10 minutes, observe the soil in the jar without touching or disturbing the jar. Have different soil layers formed? How many?

5. On the next day, use a ruler to measure the thickness of each soil layer. What percentage of the sample is made up of sand? What percentage is made up of silt? Is there a layer of clay visible on top of the silt layer? Using the soil triangle, plot the percentages of sand, silt, and clay to determine the texture of your sample. (See the sample exercise below for an example of how to proceed.) Then answer questions 3 and 4 on the activity sheet.

Sample Exercise

In the soil sample at left:

- the sand layer is $\frac{1}{2}$ inch thick,
- the silt layer is $\frac{1}{4}$ inch thick, and
- the clay layer is $\frac{1}{4}$ inch thick.



Therefore, within this sample:

- sand makes up 50%,
- silt makes up 25%, and
- clay makes up 25%.

The asterisk marks the point where these percentages converge on the soils triangle at right. The soil is a sandy clay loam.

