

## Soil Texture Analysis "The Jar Test"

### Supplies

- One quart jar with lid
- 2 cups soil (enough to fill the jar half full)
- Water
- Teaspoon of liquid dish soap (optional, speeds up process)
- Ruler

### Instructions

1. Add soil to jar.
2. Fill jar with water, leaving one inch of room below the neck.
3. Put the lid on the jar and shake until thoroughly mixed. Shaking breaks apart the soil aggregates and separates the soil into individual mineral particles.
4. Leave the jar to sit for 24 hours.
5. After 24 hours, the contents of the jar will settle and you will see several layers. The bottom layer is sand. Next is silt. Next is clay. Water is the top layer.
6. Measure the thickness of the sand, silt and clay layers.

Thickness of sand deposit \_\_\_\_\_

Thickness of silt deposit \_\_\_\_\_

Thickness of clay deposit \_\_\_\_\_

Thickness of total deposit \_\_\_\_\_

7. Calculate the percentage of sand, silt and clay.

$[\text{clay thickness}] / \text{total thickness}$  \_\_\_\_\_ = % clay

$[\text{silt thickness}] / \text{total thickness}$  \_\_\_\_\_ = % silt

$[\text{sand thickness}] / [\text{total thickness}]$  \_\_\_\_\_ = % sand

8. Bring this information and the jar of soil to class.

