

Separating Soil Experiment

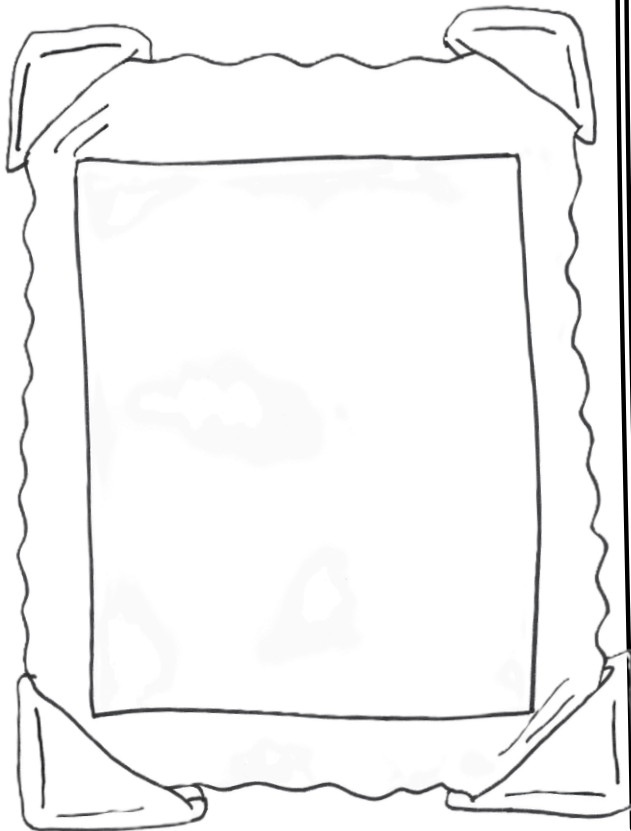
How can you see the composition of soil?

This experiment shows the different particles that make up soil. Each layer plays a role in supporting plant life and ecosystems.

Supplies:

- ✓ Glass jar with lid
- ✓ Soil samples (from different locations)
- ✓ Water
- ✓ Liquid dish soap
- ✓ Spoon for stirring

My Drawing



Experiment:

- Fill each jar about 1/3 full with different soil samples in each jar
- Fill the jar with clean water until it is about $\frac{3}{4}$ full
- Add one teaspoon dish soap
- Close the lid tightly and shake well until the soil is mixed in the water
- Place the jar upright and let the soil settle for several hours, or overnight
- Observe the different layers formed in the jar
- Bottom: largest particles (gravel and sand)
- Middle: smaller particles (silt and clay)
- Top: organic matter
- Take notes on the ratio of layers and their colors and textures

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Name: _____ Date: _____

I got my soil sample from: _____

Before adding water, the soil in the jar was
_____ cm high.

After adding the water, the mixture was
_____ cm high.

After settling it has:

		Fraction of total:	Percentage of Total:
gravel & sand	cm		
silt & clay	cm		
organic matter	cm		