



Soil Activities

Agape Center for Environmental
Education

Soil: Sediment Jar (K-8)

This activity focuses on observing soil and the particles that make up our soil.

Supplies:

- Glass jar/clear container with a lid
 - Soil (not fertilizer)
 - Water

Directions:

- Fill jar about halfway with soil (make sure not just to get the top layer, but dig down a bit to get a good variety).
- Fill the container up the rest of the way with water.
- Place lid on jar and shake the contents.
- Wait for the sediment to settle and observe the layers.
- Talk about sand, silt, and clay that may be visible.

Addition:

Get several samples from various places and compare the resulting layers. Discuss why the soil may be different in those locations.



Soil: Erosion Zone (3-6)

This activity focuses on how vegetation can effect erosion. It will also demonstrate how erosion can effect water quality.

Supplies:

- 3 two-liter bottles
 - Soil
 - Leaves
- Vegetation (preferably with established roots)
- 3 clear containers
- Water



Directions:

- Cut the side of all the two-liters off, leaving the neck and bottom intact.
- Fill each two-liter with soil: one with just soil, one with soil and leaves, and one with soil and vegetation (hopefully with established roots).
- Lay the bottles down at an angle so that any water that may come out the top will go into a clear container.
- Pour water at the bottom end of each of the bottles and see what comes out the end.
- The result should have extremely dirty water for the bottle with just soil, moderately dirty with the leaves, and pretty clear with the vegetation.
- Discuss erosion and run-off.

Soil:

Particle Visualization (3-5)

This activity focuses on the particles found in soil to understand their sizes and how they fit together.

Supplies:

- Basketball
- Baseball
- Golf Ball

Directions:

- Use the various balls to represent soil particles using the chart provided.
- Having the clay be represented by something flat would be great because the clay particles themselves are flat. That is why they stick together so well.
 - Discuss as you see fit.

Particle	Size Comparison
Sand	Basketball
Silt	Baseball
Clay	Golf Ball (or a poker chip/button about the size of a golf ball)