Soil Composition Test Provided by *Desert Oasis Teaching Garden*

What's Your Soil Made Of?
Let's Test It!

1. Use a clear, clean, empty glass jar with a tight lid. A mason jar or a reused jelly jar work fine.
2. Collect some soil from your yard. Fill the jar about half full of soil.
3. Fill the jar the rest of the way with water, leaving room at the top for shaking.
4. Tighten the lid and shake the jar for several minutes so that all the particles are in suspension.
5. Set your jar soil test aside for several hours so the particles have a chance to settle. They will separate into visible layers of clay, silt, and sand. Clay is the smallest (and lightest-weight) particle and will be on top. Sand is the largest (and heaviest) particle size and will be on the bottom. The silt layer will be in the middle.

The look and feel of soil is referred to as SOIL TEXTURE and is determined (in part) by the size and type of particles that make up the soil.

Soil Composition Test Provided by *Desert Oasis Teaching Garden*

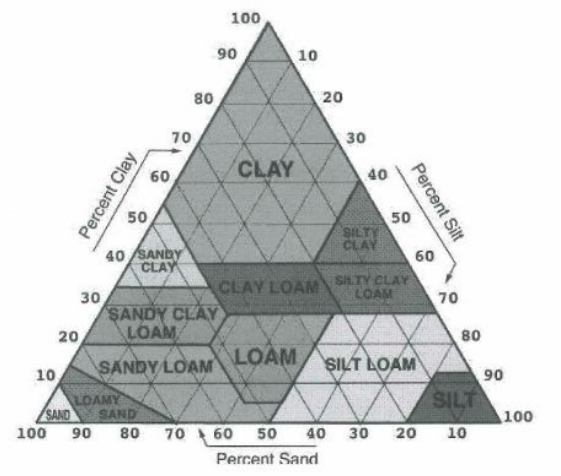
What's Your Soil Made Of?
Let's Test It!

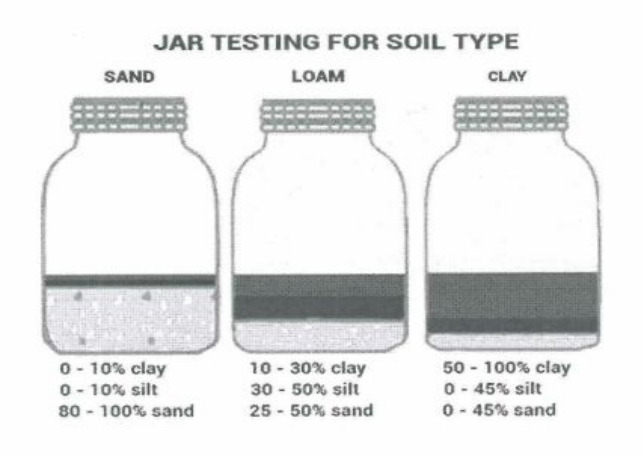
1. Use a clear, clean, empty glass jar with a tight lid. A mason jar or a reused jelly jar work fine.
2. Collect some soil from your yard. Fill the jar about half full of soil.
3. Fill the jar the rest of the way with water, leaving room at the top for shaking,
4. Tighten the lid and shake the jar for several minutes so that all the particles are in suspension.
5. Set your jar soil test aside for several hours so the particles have a chance to settle. They will separate into visible layers of clay, silt, and sand. Clay is the smallest (and lightest-weight) particle and will be on top. Sand is the largest (and heaviest) particle size and will be on the bottom. The silt layer will be in the middle.

The look and feel of soil is referred to as SOIL TEXTURE and is determined (in part) by the size and type of particles that make up the soil.

Math Extension: Use a ruler to measure the height of the soil in the jar. Next, measure the individual height of each soil layer (clay, silt, sand) in the jar. Now, using these proportions, you can calculate the percentage of clay, silt and sand in your soil sample. Use the triangular diagram and your percentages to determine your soil type.

Next Generation Science Standards (NGSS) K-12: ESS2.A: Earth Materials and Systems.





Math Extension: Use a ruler to measure the height of the soil in the jar. Next, measure the individual height of each soil layer (clay, silt, sand) in the jar. Now, using these proportions, you can calculate the percentage of clay, silt and sand in your soil sample. Use the triangular diagram and your percentages to determine your soil type.

Next Generation Science Standards (NGSS) K-12: ESS2.A: Earth Materials and Systems.