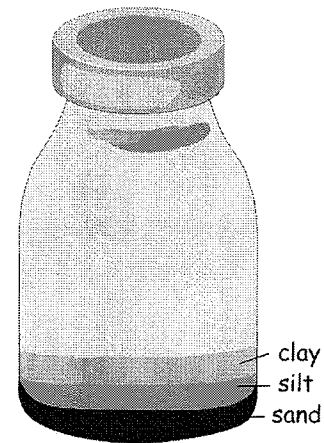


Soil Texturing in a Quart Jar (Soil Hydrometer Test)

Place 3 inches of dry, crushed soil in a tall quart (Mason) jar. Fill the jar 2/3 full with water and add one teaspoon of a dispersing agent such as Calgon or table salt (sandy soils will not require the dispersing agent). Shake the jar thoroughly (clay samples require more shaking) and then let the contents settle. Sand will settle to the bottom in about one minute. Measure the depth of that layer. Silt will settle in three to four hours. You should see a color and size difference between the sand and silt layers. If not, measure the depth of both layers and subtract the sand depth from the total to determine the silt depth. The clay takes days to settle. Determine its depth in the same way as for the silt. Some of the smallest clay particles may remain permanently in suspension and will not settle out. Measure the depth of each layer of soil particles, you can then figure the percentage of sand, silt, and clay in your soil. For example, if you have a 1/2 inch deep layer of sand on the bottom and the overall depth of the soil is one inch, then your soil has about 50 percent sand. The stuff floating on the top is organic matter. You can use the SDA International Soil Textural Triangle to determine your exact soil type.

Materials	
<input checked="" type="checkbox"/>	Soil
<input checked="" type="checkbox"/>	Ruler
<input checked="" type="checkbox"/>	Quart jar
<input checked="" type="checkbox"/>	Water
<input checked="" type="checkbox"/>	Calgon or salt (optional)



Reading the Textural Triangle

Once you have determined the percentages of sand, silt, and clay, follow the lines toward the adjacent side of the triangle to determine your soil textures. For example, if you have 50% sand, 40% silt, and 10% clay, your soil type would be a loam.

