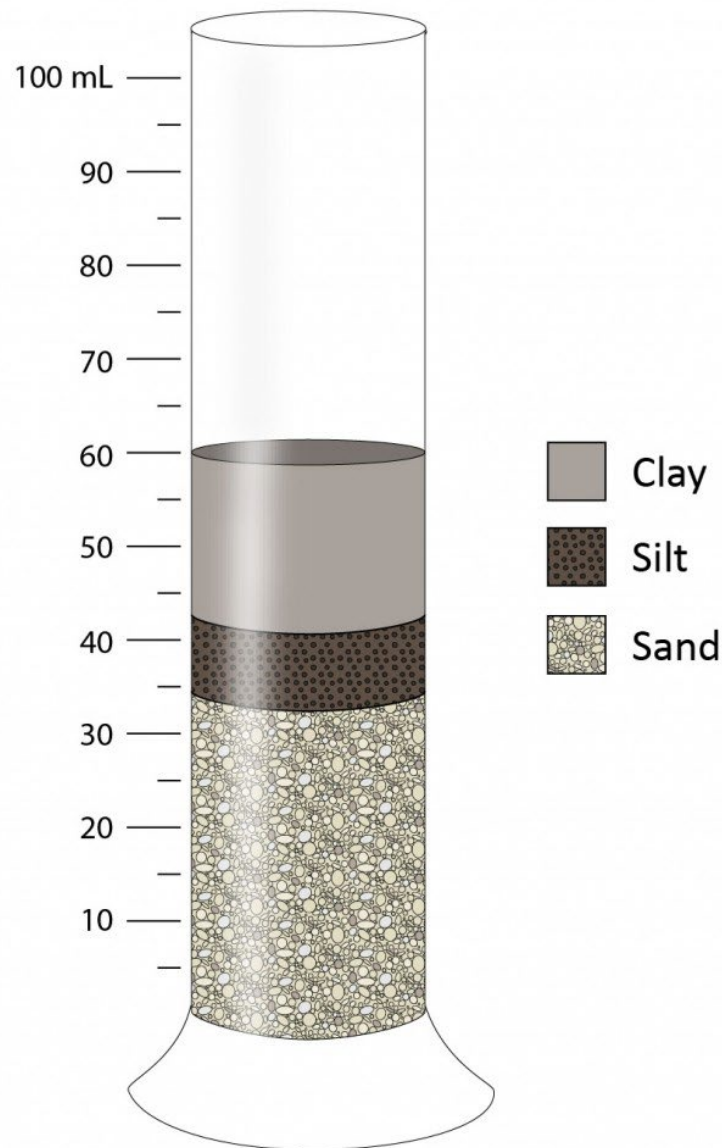


You will observe a cylinder containing a sample of soil that has been separated into the three types of particles: sand, silt, and clay. You will then determine the relative percentages of each particle type. Lastly, you will use the soil texture triangle to classify the soil sample.

1. Observe the visible layers in the soil separation cylinder in Figure 1.



**Figure 1.** Soil separation results.

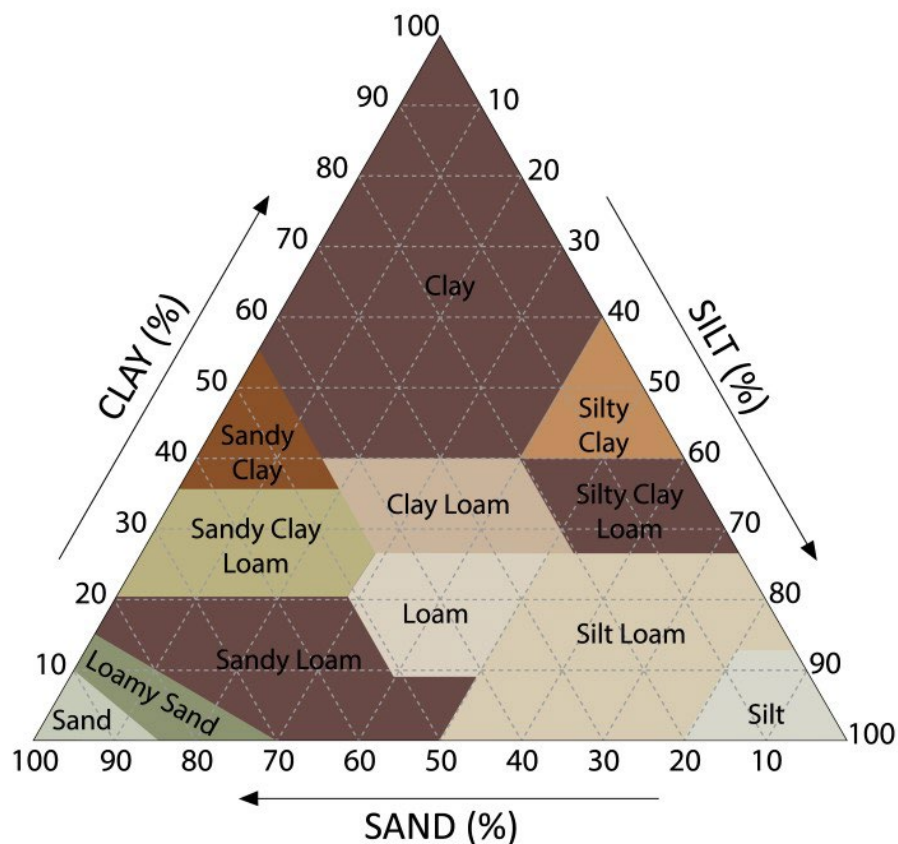
2. Determine and record the the volume of each layer.
3. Check your measurements by adding the three volumes. The sum should equal 60 mL.

**Note: You should have recorded the follow values represented in Figure 1: Sand 34 mL, Silt 8 mL, Clay 18 mL.**

4. Calculate the percent composition of each layer:
5. Check your calculations by adding the three values. The sum should equal 100%.

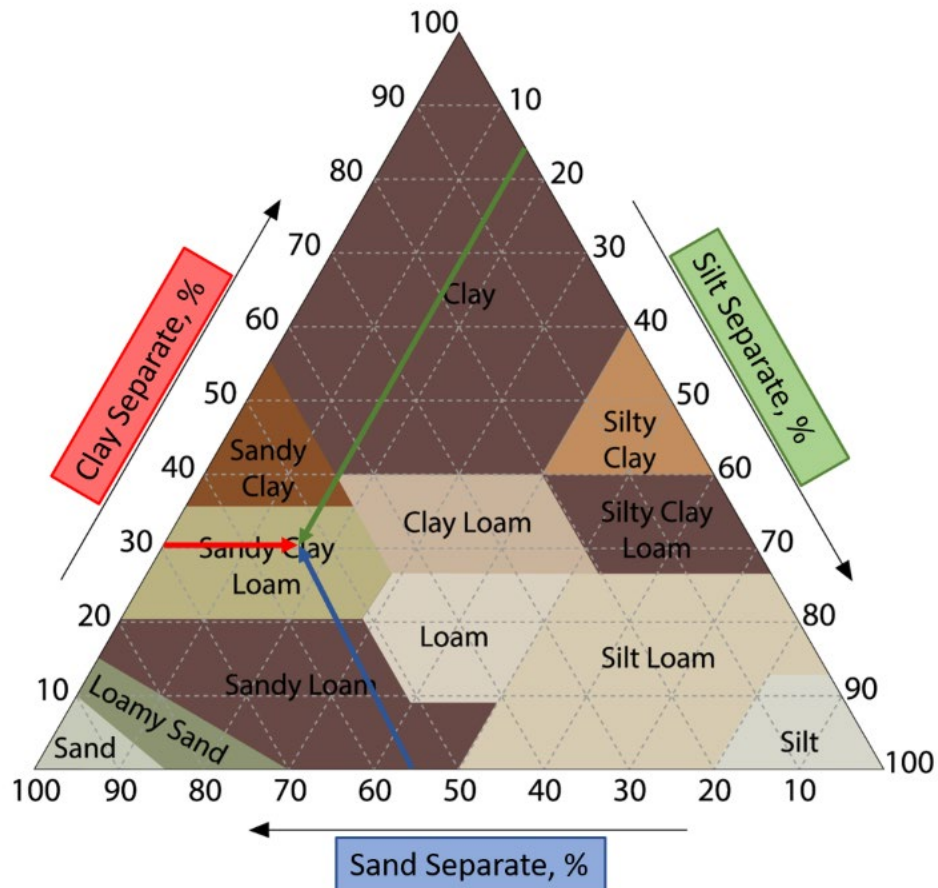
**Note: You should have calculated the following percentages: Sand 57%, Silt 13%, Clay 30%.**

6. Observe the soil texture triangle in Figure 2.



**Figure 2.** Soil texture triangle.

7. Draw a horizontal line from the calculated Clay % value to the diagonal intersection of the calculated Silt % value.
8. Confirm the intersection by noting the indicated Sand % value on the chart to your calculated Sand %. See Figure 3.



**Figure 3.** Plotted lines on soil texture triangle.

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9. Record the category label where the three percent composition lines intersect as the soil texture for the sample.

**Note: The sample is classified as Sandy Clay Loam.**