






There are
different kinds of
soil, what kind do
you have?



Grab some SOIL!		
Step 1	<p>Observe!</p> <p>Can you describe your soil? Color, texture, smell?</p>	
Step 2	<p>Look closely...What do you see? Rocks, leaves twigs, bugs?</p> 	

Step 3	<p>Take a small bit of soil and squish it with your fingers, does it break? Squish? Describe what happened.</p> 		
Step 4	<p>Grab a handful of soil and wet it with a spray bottle (not too much!). Try to make a ball, can you?</p> 	Yes → Go to Step 5	<p>No → <i>You have SAND! Great for Castles and digging.</i></p>
Step 5	<p>Place the ball of soil between your thumb and finger and gently push and squeeze it into a ribbon? Can you make one an inch (2.5 cm) long?</p>  	Yes → Go to Step 6	<p>No → <i>You have Loamy Sand! Amazing for gardening.</i></p>
Step 6	<p>Can you form a ribbon at least 2 inches (5 cm) long?</p> 	<p>Yes → Call it Clay <i>You can use clay to make sculptures.</i> Go to Step 7</p>	<p>No → Call it a Clay Loam <i>Clay Loam is also amazing soil to grow plants</i> Go to Step 7</p>

Step 7	<p>Wet a small pinch of the soil in your palm and rub it with your finger. How does the wet soil feel?</p> 	Very Gritty → Add Sandy to your soil type.	Very Smooth → Add Silt or Silty to your soil type.	A little Gritty → Don't add a thing.
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Fill the quart jar with water, screw on the lid, and shake it! Set aside and let it sit overnight. The soil will settle out with the largest and heaviest soil particles on the bottom with the lighter and smaller on top. Humus (the organic part) will be on top, with some floating in the water above the soil. Find the width of the humus band and the total soil width to the nearest cm.

Divide the thickness of the humus layer by the thickness of the soil sample to get the fraction of humus to soil (i.e. 2 cm of humus divided by 10 cm of soil equals 2/10). Try to find the equivalent reduced fraction, if possible.

Humus Amount Calculation				
	Width of Humus Band (cm)	Width of Soil Sample in Jar (cm)	Fraction of Humus to Soil	Equivalent Reduced Fraction
<i>Example</i>	<i>6 cm</i>	<i>10 cm</i>	$\frac{6}{10}$	$\frac{3}{5}$
Your soil				

Do you think your soil is healthy? Would Steve agree?

What about your soil made it healthy or not?