

TRY IT AT HOME: #MYSOILRECIPE



CANADA AGRICULTURE AND FOOD
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Grade Level: JK - Grade 12 (Ontario),
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Are all soils the same? Can you figure out the recipe for the soil in your garden?

Soil is made up of three ingredients: 1.-**Sand**, 2.-**Silt** and 3.-**Clay**.

1. **Sand** is made of round particles of rocks and minerals and are the largest particles in the soil. Sand is important because it creates spaces in the soil for water and air flow. If there is too much sand, though, water will drain away quickly and plants will need more water and nutrients.
2. **Silt** is also made of particles of rock and mineral but these particles are smaller (less than 0.005 cm).
3. **Clay** is made of tiny flat mineral particles that fit closely together. Clay is important because it helps store nutrients and water, but if there is too much clay it can make the soil hard to dig, too wet, and too cold.

The ideal garden soil recipe is made of 40% sand, 40% silt, and 20% clay. This type of soil is called **loam**. Loam soil is great for plants because it holds more nutrients and moisture, allows good water flow, and is easy to dig.

Here's an easy way to discover the recipe for your garden soil!

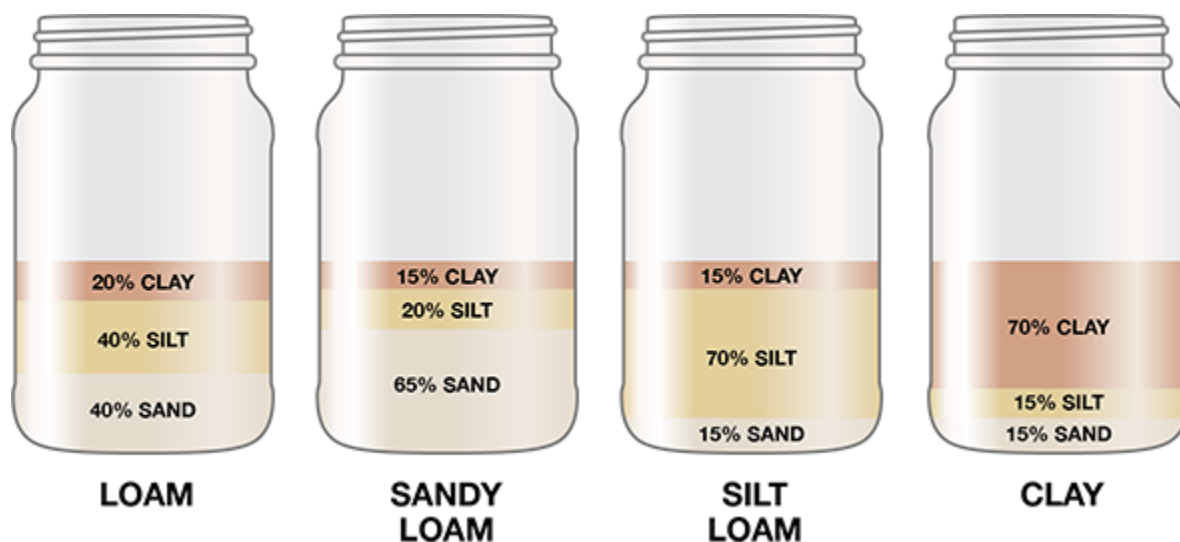
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What you will need:

- A jar
- A spade or spoon for digging up some soil
- Water
- Marker

Instructions:

1. Choose an area in your garden and dig up some soil. Make sure to set any worms back in the ground.- Fill the jar about half full with garden soil
2. Add water and fill nearly to the top. Tighten the lid.
3. Shake! Shake! Shake! Do this for several minutes so that the soil and water are well mixed!
4. Set your jar aside for a few hours. The particles will slowly separate into layers. The bottom layer is the sand, the middle layer is the silt, and the top layer is the clay. Any organic matter will float to the top.
5. With your marker, draw lines on the jar to mark the 3 layers.
6. Compare you jar to the chart below to find out your soil's recipe



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