

Nature is a great teacher, and getting kids outside to learn and play is good for their brains and their bodies. Try this outdoor activity from Project Learning Tree®—it's safe, fun, and educational!

SOIL BUILDERS

Explore the differences in soil types and composition.

Who doesn't like getting their hands a little dirty? The next time a child in your care decides to dig a hole in the ground, turn it into an educational opportunity. Describe to children that you will conduct an experiment to analyze the soil sample they have just collected. As you dig and collect soil samples, ask:

- What do trees and other plants get from soil? If so, why?
- Do different plants have different soil needs?
- Describe the soil: What color is it? How does it smell? How does it feel?

Have children make a "soil shake" by placing one half cup of soil into a jar with a lid and adding two cups of water. Ask them to predict what will happen if they shake the closed jar and let it settle for a few hours. Then, try it. Over time, soil layers will become visible. Gravel will fall first; then sand, silt, and clay; organic matter (leaves, twigs, stems) will remain floating in the water. Have children draw a picture of the layers formed by their soil shake, or collect and test soil samples from other areas (forest, field, yard) for comparison.

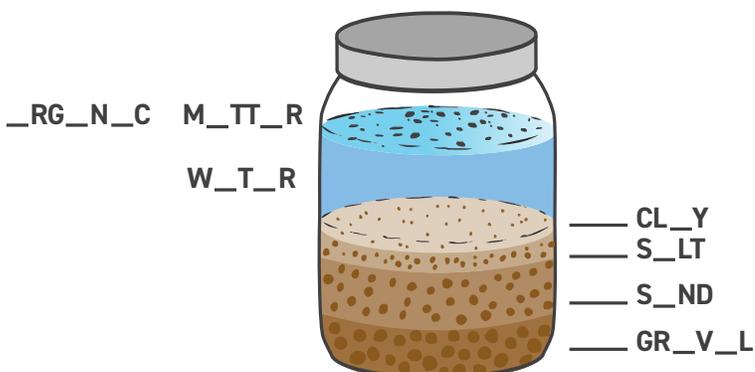


SAFETY CHECK! Get permission before taking soil samples. Use plastic jars, if possible.

Challenge children to complete the "Soil Composition" diagram, reminding them that the largest particles fall to the bottom first.

SOIL COMPOSITION

1. Fill in the missing vowels to label the jar layers.
2. Match up the measurements with the appropriate soil layer. All measurements are in millimeters (mm).



- a) 2.0 – 0.06mm
- b) greater than 2.0mm
- c) less than 0.002mm
- d) 0.06 – 0.002mm

CONNECT KIDS TO NATURE!

Encourage your child's school to incorporate outdoor learning by connecting with your local PLT program.

Contact the Louisiana PLT State Coordinator:
Stacy Blomquist
stacy.blomquist@usda.gov

FOREST FACT

80% of the total carbon stored in Canada's boreal forest is in the soil. Microorganisms in the soil are essential for decomposing dead matter and storing carbon in soil humus.

