

The Land Conservancy for Southern Chester County

Food is Medicine: Rainy day soil activities

Rainy Day Exploration



Venture outside in the rain! Take a deep breath. What do you smell? Now look around. What are some things you notice? Collect your data by listing or drawing pictures.

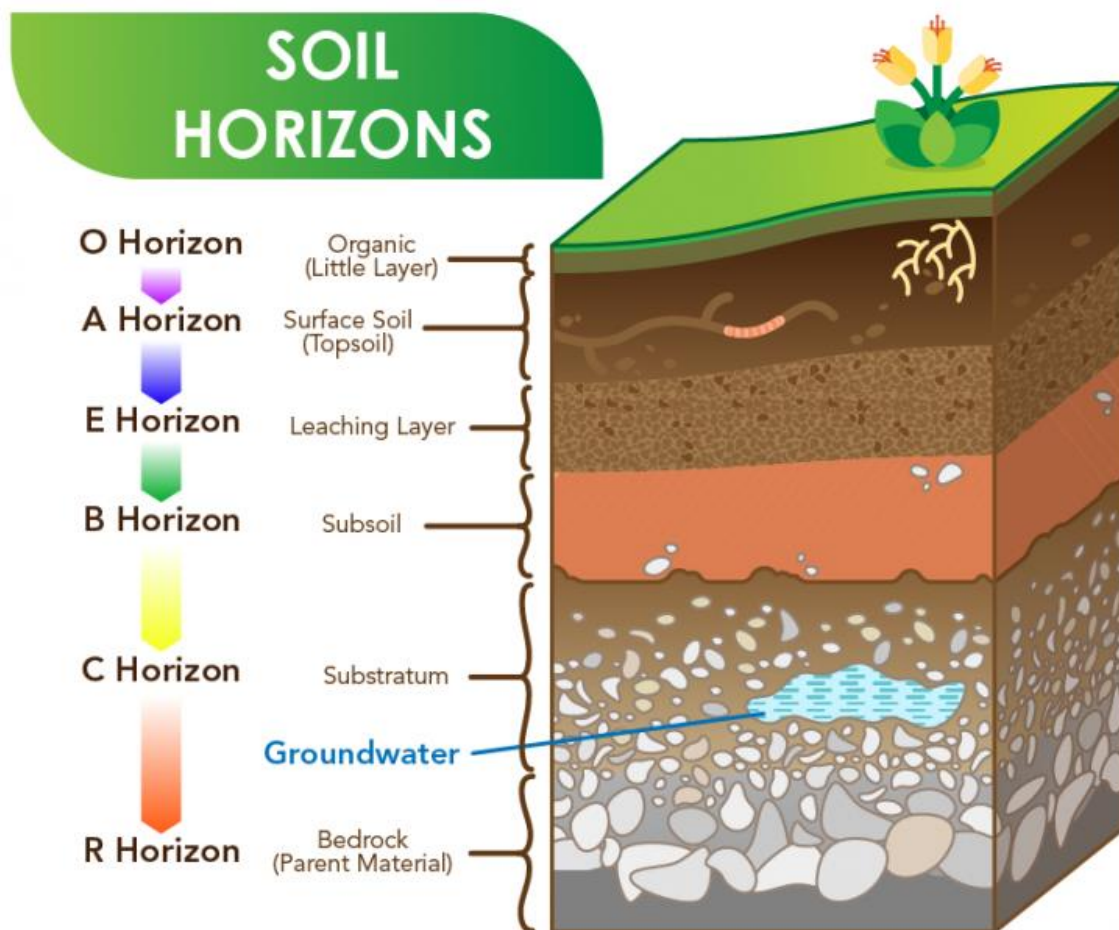
Let's dig in! You need a spoon, small hand shovel/rake, or other digging utensil. Find a spot in your yard and dig a hole about 6 inches deep (does not have to be exact). If you do not have a yard, feel free to use any spot with grass. Even flowerpots with dirt in them can be fantastic exploration sites!

Think Aloud!

- How does the soil look different when it is wet?
- Does it feel different?
- What are some species/creatures that you have found in the soil?
- Are the species that you found in the soil active?
- Draw or take pictures to record your data (information).

1. Soil layers

Some classes have learned that there are different types of soil. Four main types that we have discussed is humus, topsoil, clay, and sand. Under the ground there are soil layers that play an important role in our environment. They help filter water, drain water to prevent flooding, and provide habitat. Let's look at one example of soil layers. Do not get discouraged with this activity as there are many sources online that give different information. Use the example below, or search for another picture to use. I really like this picture from [Let's Talk Science](#).



The layers in this picture are clear and well-defined. Don't focus on the layer names. For this activity, we will focus on the layer construction. Notice how the layers have small, medium, and large substances. For example, at the bottom the rocks are much larger than in the middle. At the top, the organic layer is small pieces of leaves, dead insects, crumbles of broken-down wood from trees and branches, and much more! Some of the students have already learned about what makes that organic top layer.

Use items around your house to create these layers. Begin with finding items that are small pieces. You can use beads, pieces of rice or oatmeal. Then you'll want to search for items that are just a bit larger in size. For example, m&m's (a fun treat), dimes, or small pebbles. For the subsoil, try something that shows the soil coming together, cotton balls, a piece of fabric from an old shirt or wash cloth. You'll want to find two more size objects. For the C horizon (using the above picture), search for items that are the size of pennies. For the final horizon, the bedrock, items the size of grapes would work (another fun and healthy treat). Have your students put together the layers of soil! Use a blank sheet of paper and have them label their unique layers!

This is fun activity to get your students learning about soil on a day where they may be stuck inside. It is a great way to transition from work to snack time! I would love to see pictures of your work. Please feel free to send them to teachers and they can send them to me!

Soil Facts Cheat Sheet:

- Soil is ALIVE! It breathes in and out CO₂
- Dead roots are a source of energy for other plants and critters
- The dead plant matter on top keeps the soil cool down below and helps prevent erosion
- The more organic matter (dead plants, dead insects) the soil contains the more water the soil holds, preventing flooding during hard rainfall