

My nature connection

SOIL LAYER SNACKS

GRADES: K-12
TIME: 30 MIN.

WHAT IS SOIL?

Soil is the basis of all life! It helps fuel the growing process for millions of plants and animals. Have you ever wondered what is going on below the surface?

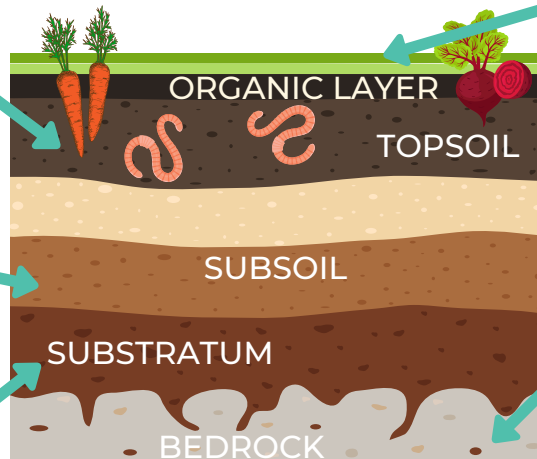
INTRODUCTION

Underneath you, many different layers of soil are crawling with critters, fungi, and bacteria and are made up of different textures and colors. Over time, water, air, other living organisms, and gravity cause the deepest soil layer — bedrock — to break down into smaller pieces through **weathering**. This creates the soil you feel right below your feet today! The diagram shares more about these layers.

Topsoil: This is the dark and nutrient-rich layer of soil where plants grow strong, deep roots. Worms and insects make their homes here.

Subsoil: Made of small rock particles, this layer is harder to dig into and more compact. Only very tiny organisms live in this layer.

Substratum: This section is mostly made up of partially broken-down rocks.



WHAT YOU'LL NEED

- 1 jar or cup
- 3-6 sweet foods that you think would taste good together
- 1 spoon

Organic Layer: This area is rich with minerals from living and dead plants. Broken down leaves and other material create a bed of natural fertilizer for plants to grow.

Bedrock: This is the deepest, original form of soil that hasn't been broken down yet. If you dug forever, you would find bedrock thousands of feet deep in the Earth.

ACTIVITY: MAKING SOIL LAYER SNACKS

This activity is a great way to practice remembering all the layers of soil! Follow these steps to build a soil layers snack:

1. With an adult's help, gather three to six ingredients in your kitchen that you think would taste delicious if mixed. Each of the ingredients will represent a different layer of soil.
2. Find a glass jar or cup that allows you to see each soil layer as you add them.
3. Using the information about each layer above, add each ingredient to your jar in the order that makes the most sense to you. Consider how the look and texture of each layer may vary. For example, you might put the largest ingredient at the bottom and the smallest at the top.

Share your snack
with a family
member or friend
and teach them
all about the soil
layers!



The example above is a mixture of both healthy and sweet ingredients:

- Bedrock — Blueberries
- Substratum — Chocolate Chips
- Subsoil — Yogurt
- Topsoil — Banana
- Organic Layer — Granola & Gummy Worms

ADDITIONAL RESOURCE

CONNECTING WITH QUESTIONS

What are some other creative ways that you could recreate the layers of soil at home?

