

Lesson 8 - Soil Profiles and Testing

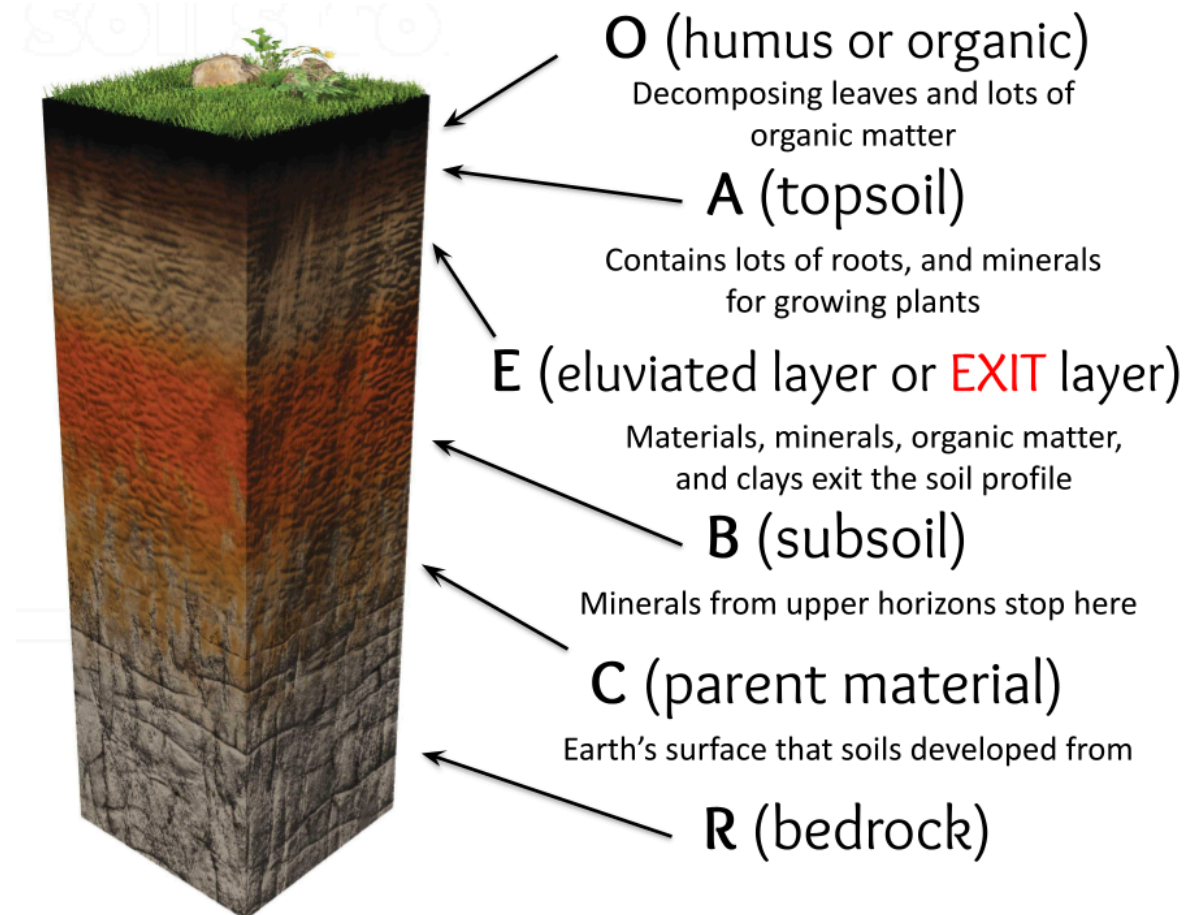
Purpose - Use a guide to test a sample.

Warm up - What are some things you do when cooking with a new recipe?



1. Draw, Color, and Label a Soil Profile Diagram

- a. [Example](#) (Only use pages 1-5. Diagram on p. 3)



2. Soil Testing

- Which "horizons" of a soil profile do we use for most of our farming?
- Test a soil sample.
- Use the soil testing kits. Follow the instructions.
- Record your results.

Extra - This was an idea for a model that you could make for a tasty snack.

Search result idea

A great way to connect food to soil systems in a high school science lesson is by having students build an edible soil profile and trace a specific crop's nutrient cycle from the earth to the dinner table. [\[1, 2\]](#)

Hands-On Activity: Edible Soil Horizons & Nutrient Flow

- **Bedrock (Horizon R):** Use a whole cookie at the bottom of a clear cup to represent solid, unweathered rock.
- **Parent Material (Horizon C):** Add crushed cereal or chocolate chips to show weathered rock fragments.
- **Subsoil (Horizon B):** Add pudding or yogurt to represent the layer where minerals and clay accumulate.
- **Topsoil (Horizon A):** Add crushed cookies or dark granola to represent the nutrient-rich layer packed with organic matter where plants grow.
- **Organic Layer (Horizon O):** Top with shredded coconut or sprinkles and a gummy worm to symbolize decomposers cycling food waste back into nutrients. [\[1, 2, 3, 4\]](#)