

# Soil on the Horizon

If you look at a construction site or a roadside cut you will see multiple layers in the soil. These layers are called **soil horizons**. The order in which these horizons are arranged is a **soil profile**. Soil profiles and soil horizons are used to determine what soil at different locations can be used for.

Soil horizons can differ greatly from location to location in ways that are easy to detect such as color, texture, structure and thickness. They can also differ in ways that aren't so easy to see and require laboratory tests like chemical and mineral content, consistency and reaction.

Soil scientists use the capital letters **O**, **A**, **B**, **C** and **E** to identify the major horizons. Most soils have three major horizons; A, B, and C.

**A** = surface horizon

**B** = subsoil

**C** = substratum

**O** = organic horizon (can be on the surface or buried)

**E** = horizons with substantial mineral loss

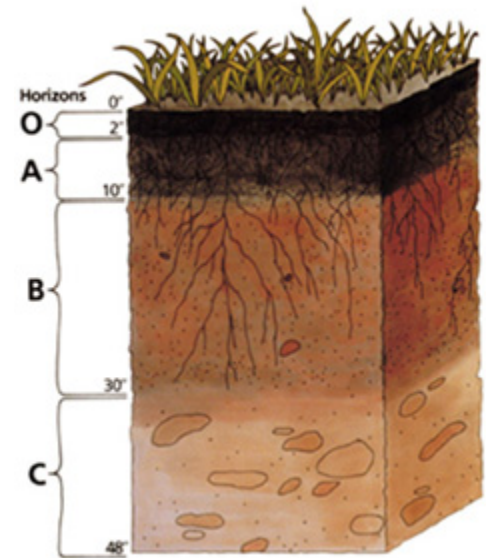
## Materials you will need:

Soil Profile Cards

One-inch wide Carpet Tape

Scissors

Measuring Tape



## How to make a soil profile:

1. Copy the soil profile cards onto cardstock and cut them apart or design your own on 3" X 5" index cards.
2. Attach a strip of carpet tape to each soil profile card. The tape needs to extend vertically from the 0" mark on the card to the 72" mark.
3. Measure the depth of the Surface Horizon at your site. Pull back the tape at the top of your soil profile card to the marking that corresponds to the depth of the horizon you just measured and place soil from that horizon onto the exposed sticky area. Repeat for each of the horizons at your site, pulling back the tape for each layer.

Name \_\_\_\_\_

Date \_\_\_\_\_

Soil Name \_\_\_\_\_

Horizon

A 0"

12"

B 24"

36"

C 48"

60"

72"

<http://soils.usda.gov>

Soil Name \_\_\_\_\_

Horizon

A 0"

12"

B 24"

36"

C 48"

60"

72"

<http://soils.usda.gov>

Soil Name \_\_\_\_\_

Horizon

A 0"

12"

B 24"

36"

C 48"

60"

72"

<http://soils.usda.gov>

Soil Name \_\_\_\_\_

Horizon

A 0"

12"

B 24"

36"

C 48"

60"

72"

<http://soils.usda.gov>

Soil Name \_\_\_\_\_

Horizon

A 0"

12"

B 24"

36"

C 48"

60"

72"

<http://soils.usda.gov>

Soil Name \_\_\_\_\_

Horizon

A 0"

12"

B 24"

36"

C 48"

60"

72"

<http://soils.usda.gov>