

# Module 8: Weathering, Erosion, and Groundwater

## Topic 3 Content: Soil Profile Notes

### Introduction

#### Soil Profile

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Soils have different layers called horizons. How does the composition of each horizon differ? Click **NEXT** to learn about the different horizons that exist in a soil profile.



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## Module 8: Weathering, Erosion, and Groundwater

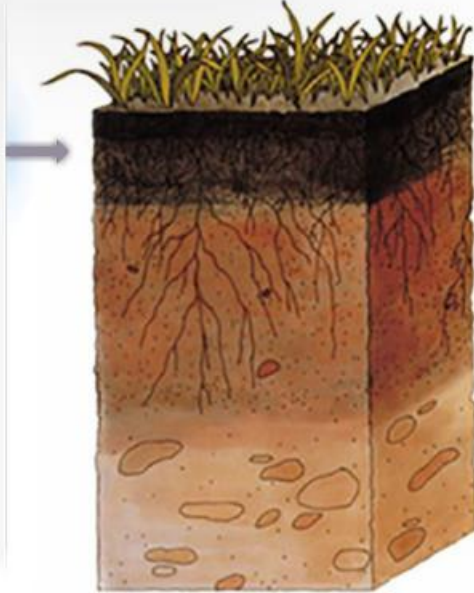
### Topic 3 Content: Soil Profile Notes

#### A Horizon

**Soil Profile**

**A Horizon**

The A horizon is positioned nearest to the surface of Earth. This layer is composed of humus. This horizon is easily determined by its dark brown color. The A horizon has a texture that is spongy.



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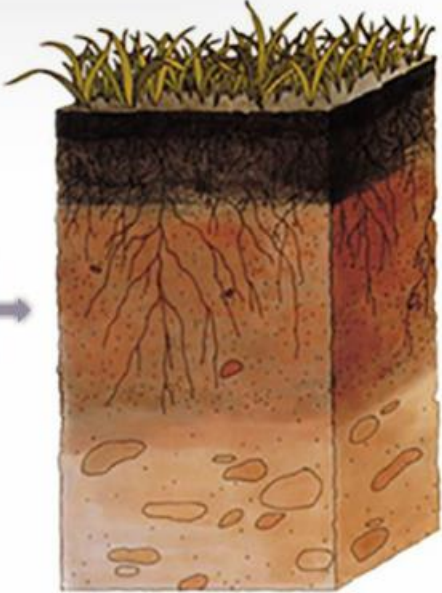
### Topic 3 Content: Soil Profile Notes

#### B Horizon

**Soil Profile**

#### B Horizon

In a mature profile, the B horizon is found immediately beneath the A horizon. This horizon is composed of fine grained sediments like sand, silt, and clay. This horizon contains elements that originate from the A horizon and were collected through the process of leaching. Leaching occurs when water infiltrates the ground and travels downward. As the water passes through, it carries away dissolved elements that are stopped by the less permeable clay minerals in the B horizon. Plant roots extend into this horizon to take advantage of the nutrients that have been removed from the A horizon. The color of the B horizon is often reddish-brown due to the oxidation of iron. The iron is commonly leached from the A horizon.



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#### C Horizon

**Soil Profile**

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In a mature profile, the C horizon is found immediately beneath the B horizon. This horizon is composed of mostly rock fragments. These rock fragments are the same composition as the bedrock found below the horizon.



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