

## Chapter 6

Text Pages 156–163

## STUDY GUIDE

## ● Soil

Use the terms in the box to complete the sentences. Use the information in your textbook.

soil	humus	A horizon
horizons	composition	below
topsoil	parent	top
evolve	bottom	leaching
soil profile	water	

- \_\_\_\_\_ is a mixture of sediments of weathered rock and organic matter.
- Decaying plant and animal matter is called \_\_\_\_\_ .
- Due to weathering, different layers, or \_\_\_\_\_ , of soil form.
- Soil generally has three layers, and these make up a \_\_\_\_\_ .
- The A horizon is the \_\_\_\_\_ layer and is also known as \_\_\_\_\_ .
- The B horizon is the layer \_\_\_\_\_ the A horizon.
- The C horizon is the \_\_\_\_\_ layer in a soil profile; it contains partly weathered rock but no humus.
- Below the bottom horizon is \_\_\_\_\_ rock.
- You can tell that the \_\_\_\_\_ is the most fully evolved soil layer because it has more humus and smaller rock fragments than the other layers.
- \_\_\_\_\_ moving downward through the horizons dissolves and carries minerals into lower horizons by the process of \_\_\_\_\_ .
- The thickness of the soil layers and their \_\_\_\_\_ depend on the climate, slope of the land, and the type of rock in an area and how long the soil has been evolving.
- Soil horizons \_\_\_\_\_ more slowly in an area that has little rainfall because chemical weathering occurs slowly in a dry climate.

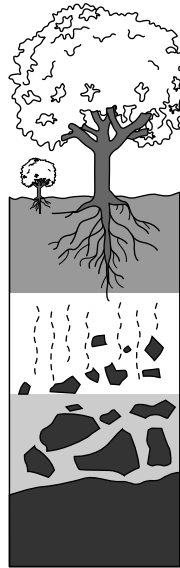
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## REINFORCEMENT

## ● Soil

Use the diagram of a soil profile to answer Questions 1–5 on the lines provided. Then answer Questions 6 and 7.



**A horizon:** organic matter, roots, worms, insects and other living organisms

**B horizon:** some roots and other living organisms, materials leached by water from the A horizon

**C horizon:** materials leached by water from the B horizon, partly weathered rock fragments

**Solid Rock**

1. Which soil layer contains the most humus? \_\_\_\_\_  
\_\_\_\_\_
2. How far into the soil do plant roots extend? \_\_\_\_\_  
\_\_\_\_\_
3. Where in this soil profile are worms and insects breaking down organic matter in the soil?  
\_\_\_\_\_
4. Where in this soil profile is solid rock being weathered into soil? \_\_\_\_\_  
\_\_\_\_\_
5. What is the name of the process by which water carries materials from the upper horizons down to the lower levels? \_\_\_\_\_
6. What factors in an area help determine the type of soil—the thickness of the layers and their composition? \_\_\_\_\_  
\_\_\_\_\_
7. Choose a factor from Question 6 and explain how it can affect the soil in an area. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_