

## Directed Reading B

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### Section: From Bedrock to Soil

#### THE SOURCE OF SOIL

Read the description. Then, draw a line from the dot next to each description to the matching word.

- |   |   |                     |
|---|---|---------------------|
| 1. soil that is blown or washed away from its parent rock   | ● |                     |
| 2. the layer of rock beneath the soil   | ● | a. soil             |
| 3. a rock formation that is the source of mineral fragments in the soil                               | ● | b. transported soil |
| 4. a loose mixture of mineral fragments, organic material, water, and air that can support vegetation | ● | c. parent rock      |
|   |   | d. bedrock          |
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#### SOIL PROPERTIES

##### Soil Texture and Soil Structure

- |   |   |                   |
|---|---|-------------------|
| 5. soil quality based on the proportion of soil particles | ● | a. soil structure |
| 6. the arrangement of soil particles                      | ● | b. infiltration   |
| 7. ability of water to move through soil                  | ● | c. consistency    |
| 8. soil's ability to be broken up for farming             | ● | d. soil texture   |

Directed Reading B *continued*

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**Soil Fertility**

**Circle the letter of the best answer for each question.**

9. What is soil's ability to hold nutrients and to supply nutrients to a plant?
- a. soil structure
  - b. soil texture
  - c. soil horizons
  - d. soil fertility

**Soil Horizons**

10. What do we call the removal of substances from soil due to water passing through it?
- a. wedging
  - b. infiltration
  - c. erosion
  - d. leaching
11. What is the layer of soil that often contains the most humus?
- a. horizon
  - b. parent rock
  - c. topsoil
  - d. bedrock

**Soil pH**

12. What is soil that has a pH below 7 called?
- a. neutral
  - b. acidic
  - c. basic
  - d. midpoint

Directed Reading B *continued*

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**Circle the letter of the best answer for each question.**

13. What is the correct pH for growing plants?

- a. 7
- b. above 7
- c. below 7
- d. it depends upon the plant

**SOIL AND CLIMATE**

**Tropical Rain Forest Climates**

14. Which of the following is a characteristic of tropical rain forests?

- a. They have little plant life.
- b. They have thin topsoil.
- c. They have cold soil.
- d. They have rich humus.

**Desert Climates**

15. Which of the following is a characteristic of desert climates?

- a. They experience a lot of leaching.
- b. They have a high rate of weathering.
- c. They get more than 25 cm of rain per year.
- d. They have a low ability to support plant life.

**Temperate Forest and Grassland Climates**

16. Which of the following is true of temperate forest and grassland climates?

- a. They have little weathering.
- b. They have very steady temperatures.
- c. No leaching occurs.
- d. They have the most productive soils.

**Arctic Climates**

17. Which of the following is a characteristic of arctic climates?

- a. Soil forms slowly.
- b. They have rapid chemical weathering.
- c. They have rich humus.
- d. They have more than 25 cm of rain per year.