**Directed Reading for  
Content Mastery****Section 1 ■ How Ecosystems  
Change**

**Directions:** Complete the following sentences using the terms listed below. Some terms may be used more than once.

**primary****secondary****succession****pioneer****climax**

1. The gradual change from one community of organisms to another is ecological \_\_\_\_\_.
2. Succession that takes place in a forest that has been destroyed by fire is an example of \_\_\_\_\_ succession.
3. The first organisms to move into a disturbed environment are the \_\_\_\_\_ species.
4. A community that tends to remain the same and is in the final stage of succession is a \_\_\_\_\_ community.
5. Ecological succession that takes place in a location that does not have soil is \_\_\_\_\_ succession.
6. A beech-maple forest is an example of a \_\_\_\_\_ community.
7. When no life exists at all in an area, \_\_\_\_\_ succession begins.
8. Physical disturbances such as fires disturb the stability of a \_\_\_\_\_ community.
9. \_\_\_\_\_ succession can take hundreds or even thousands of years to develop into a climax community.
10. Number the following sentences describing primary succession so that they are in the correct order.
  - \_\_\_\_\_ a. Mosses and ferns grow in soil formed by decaying lichens.
  - \_\_\_\_\_ b. Thicker, richer soil supports the growth of shrubs and trees. Insects, small birds, and mammals move in.
  - \_\_\_\_\_ c. Eventually, the soil layer thickens and grasses, wildflowers, and other plants begin to take over.
  - \_\_\_\_\_ d. Life on a bare rock begins as lichens and the forces of weather and erosion help break down rocks into smaller pieces to form soil.

**SECTION**  
**1**

**Reinforcement**

**How Ecosystems Change**

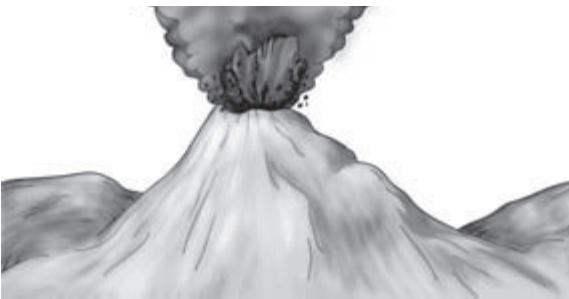
**Directions:** *What kind of ecological succession occurs after each of the following events? Write either **primary succession** or **secondary succession** under each diagram.*



1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



4. \_\_\_\_\_

**Directions:** *Answer the following questions on the lines provided.*

5. What is ecological succession? \_\_\_\_\_

6. What is the general name for the first species to grow after a volcanic eruption covers an area with lava? \_\_\_\_\_

7. How does soil form from bare rock?  
\_\_\_\_\_  
\_\_\_\_\_

8. How does succession occur after a forest fire?  
\_\_\_\_\_

9. Which takes longer, primary succession or secondary succession? Explain.  
\_\_\_\_\_

10. What is a community that has reached a stable stage of ecological succession called?  
\_\_\_\_\_