

Chapter 10**REINFORCEMENT****• Continental Drift**

Match the items in Column I with the terms or phrases in Column II. Write the letter of the correct term or phrase in the blank at the left.

Column I

- _____ 1. Reptile fossil found in South America and Africa
- _____ 2. Fern fossil found in Africa, Australia, India, South America, and Antarctica
- _____ 3. Clues that support continental drift
- _____ 4. Mountains similar to those in Greenland and western Europe
- _____ 5. Wegener's name for one large landmass
- _____ 6. Movement of continents
- _____ 7. Evidence that Africa was once cold

Column II

- a. Pangaea
- b. Appalachians
- c. continental drift
- d. glacial deposits
- e. *Glossopteris*
- f. *Mesosaurus*
- g. rock, fossil, and climate

Answer the following questions on the lines provided.

8. How did the discovery of *Glossopteris* support Wegener's continental drift hypothesis?

9. What was Wegener's hypothesis of continental drift not widely accepted at the time it was proposed? What do scientists now think might be a possible cause of continental drift?


**Directed Reading for
Content Mastery**
**Section 1 ■ Continental Drift
Section 2 ■ Seafloor Spreading**

Directions: Complete the paragraph by filling in the blanks using the words below.

Pangaea
continents

Arctic
Africa

rock
seafloor spreading

Alfred Wegener was one of the first people to suggest that all of the

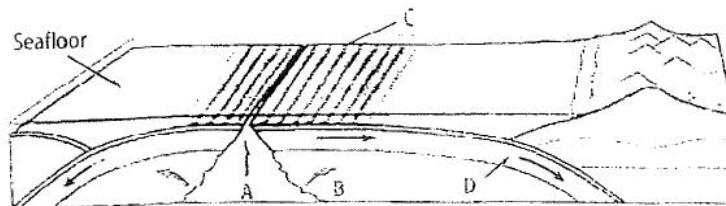
1. _____ were joined together in the past. He called the one large continent 2. _____.

Evidence exists to support his hypothesis. For example, similar fossils have been found in South America and

3. _____. Also, fossils of warm weather plants have been found in the 4. _____.

Similar 5. _____ structures exist in the Appalachian Mountains and in Greenland and western Europe. Discoveries by the ocean floor led to Harry Hess's theory of 6. _____. Scientists could not think of how the continents might move.

Directions: Study the following diagram of the seafloor. Then match the letters to the statements below.



- _____ 7. Molten rock flows onto the seafloor and hardens as it cools.
- _____ 8. Hot, molten rock is forced upward toward the seafloor at a mid-ocean ridge.
- _____ 9. New seafloor moves away from the ridge, cools, becomes denser, and sinks.
- _____ 10. Molten rock pushes sideways in both directions as it rises, moving the mantle with it.

Chapter 10

Use with Section 2

REINFORCEMENT**• Seafloor Spreading**

Find the mistakes in the statements below. Rewrite each statement correctly on the lines provided.

1. The youngest rock is found along the far edges of an ocean ridge. _____

2. The scientist Henry Hess invented echo-sounding devices for mapping the ocean floor. _____

3. As the seafloor spreads apart, hot saltwater rises and flows from the cracks. _____

4. As the seafloor moves away from the ridge and becomes hotter, it moves upward and forms still higher ridges. _____

5. The research ship *Glomar Challenger* was equipped with a drilling rig that records magnetic data. _____

6. Scientists found that the rocks were younger, closer to the trenches. _____

7. Rocks on the seafloor are much older than the continental rocks. _____

8. The oldest rocks found on the seafloor were almost four billion years old. _____

9. All the rocks on the seafloor are aligned according to the same magnetic field orientation. _____

10. Evidence supporting continental drift shows that the ocean floor is always stable. _____
