## **Seafloor Spreading Worksheet 2**

**Directions:** Find the mistakes in the statements below. Change the necessary word or wards so that each statement is correct.

- 1. During the 1940s and 1950s, scientists began using <u>radar</u> on moving ships to map large areas of the ocean floor in detail.
- 2. The *youngest* rocks are found far from the mid-ocean ridges.
- 3. As the seafloor spreads apart, hot *saltwater* moves upward and flows from the cracks.
- 4. Earth's magnetic field has *always run* from the north pole to the south pole.
- 5. As the new seafloor moves away from the ridge and becomes <u>hotter, it moves upward and</u> forms still higher ridges.
- 6. Rocks on the seafloor are much *older* than many continental rocks.
- 7. The magnetic alignment in rocks on the ocean floor <u>always runs</u> from the north pole to the south pole.
- 8. The scientist Harry Hammond Hess <u>invented echo-sounding device</u> used for mapping the ocean floor.
- 9. The research ship Glomar Challenger was equipped with a drilling rig that records *magnetic data*.
- 10. When plates collide, the denser plate will *ride over* the less-dense plate.



## Studying Seafloor Spreading on Land

You know from your textbook how seafloor spreading changes the ocean floor. You know that magma rises at the mid-ocean ridge and flows away from the ridge. In general, this activity is hidden beneath the ocean's water. But there is a place where seafloor spreading can be seen on land.

Figure 1

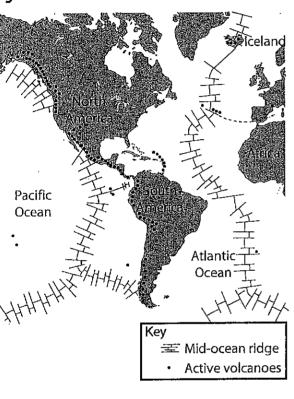
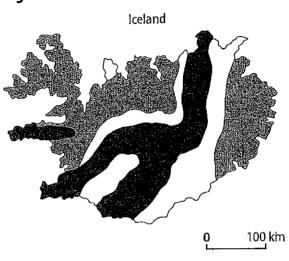


Figure 2



Key
Active volcanoes; formed from today to
10,000 years ago

Formed 10,000 to 2,000,000 years ago

Formed 2,000,000 to 63,000,000 years ago

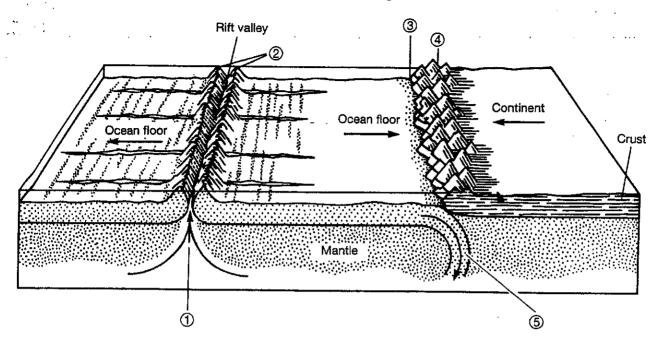
ow do the land	structures of Iceland help confirm seafloor spreading?	
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1. What is the name of the landmass through which the mid-ocean ridge in the Atlantic Ocean passes?

3. Why do you think geologists might find Iceland a useful place to conduct research on seafloor spreading?

## Interpreting Diagrams: Understanding the Main ideas

Carefully observe the diagram below. Then answer the questions that follow.



- 1. What is happening at point 1 in the diagram?
- 2. What type of feature is located at point 2 in the diagram? What is happening to the ocean floor at this point?
- 3. What feature is located at point 3 in the diagram?
- 4. What feature is being formed at point 4? Why is this happening?
- 5. What is happening at point 5 in the diagram?
- 6. Magna returns to part 1 and the process repeats this is called?