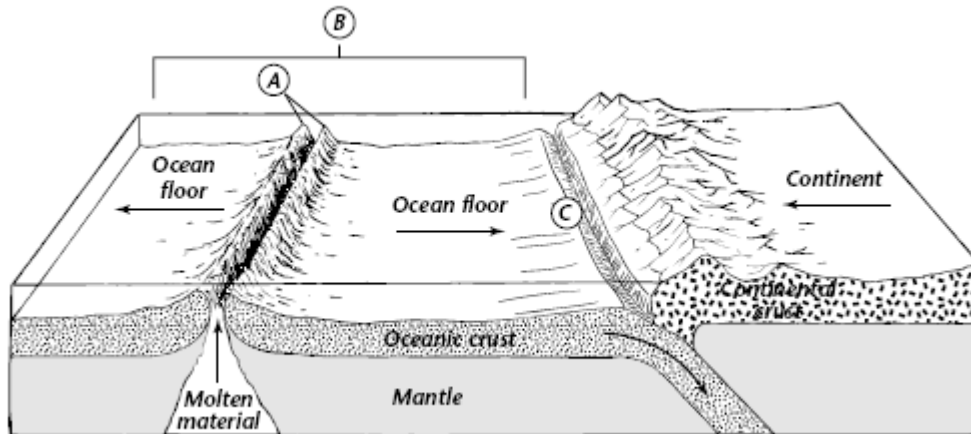


Name _____

Sea Floor Spreading Worksheet



Use the figure above to answer the following questions.

- 1) What feature of the ocean floor is shown at A?
- 2) Describe the process shown occurring at B, and explain what results from this.
- 3) What happens to old oceanic crust as new molten material rises from the mantle?
- 4) The arrows on the figure show the ocean floor spreading from the ridge. What are three kinds of evidence scientists have found to support this idea?
- 5) What process is shown occurring at C, and why does it occur?
- 6) Where would you expect to find the oldest rock on the ocean floor?

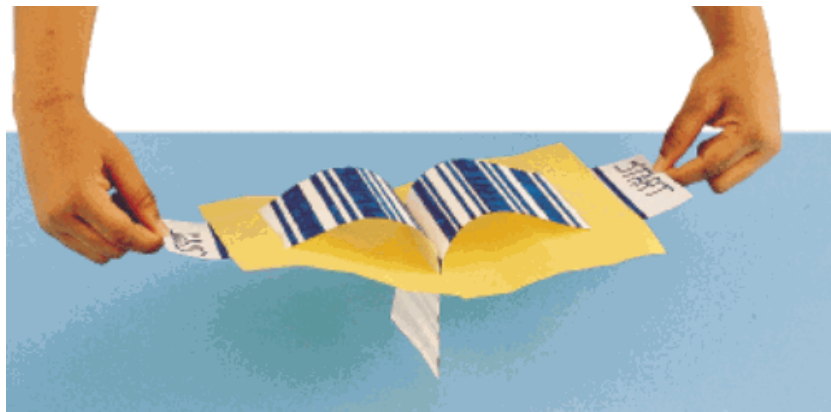
Fill in the blank to complete each statement.

- 7) A device that scientists use to map the ocean floor is _____.
- 8) The feature on the ocean floor at C is called a(n) _____.
- 9) The process that continually adds new material to the ocean floor is called _____.
- 10) The process by which the ocean floor sinks into the mantle is called _____.
- 11) The chain of mountains that extends into all of Earth's oceans is the _____.

Modeling Sea-Floor Spreading Lab Questions

Answer the following questions using your model of sea-floor spreading.

- 1) What feature of the ocean floor does the center slit represent?
- 2) What prominent feature of the ocean floor is missing from the model at this point?
- 3) What do the side slits represent?
- 4) What does the space under the paper represent?
- 5) How does the ocean floor as shown by the part of a strip close to the center slit differ from the ocean floor as shown by the part near a side slit?
- 6) What do the stripes represent?
- 7) Why is it important that your model have an identical pattern of stripes on both sides of the center slit?
- 8) How do the differences in density and temperature provide some of the force need to cause sea-floor spreading and subduction?



Richard Haynes