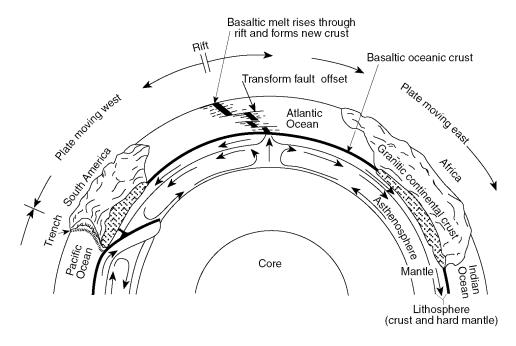
1) Base your answer to the following question on the diagram below. The diagram shows a model of the relationship between Earth's surface and its interior.

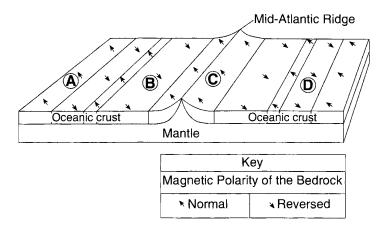


(Not drawn to scale)

Mid-ocean ridges (rifts) normally form where tectonic plates are

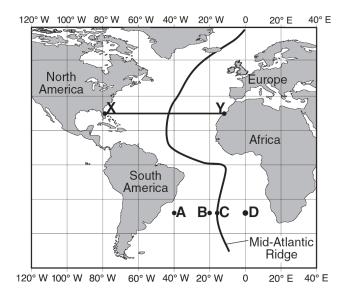
- A) moving toward one another (converging)
- B) moving apart from one another (diverging)
- C) stationary
- D) sliding past each other
- 2) Which observation about the Mid-Atlantic Ridge region provides the best evidence that the seafloor has been spreading for millions of years?
 - A) The bedrock of the ridge and nearby seafloor is igneous rock.
 - B) The ridge is the location of irregular volcanic eruptions.
 - C) Several faults cut across the ridge and nearby seafloor.
 - D) Seafloor bedrock is younger near the ridge and older farther away.

3) The diagram below shows the magnetic polarity preserved by minerals within the bedrock of the oceanic crust near the Mid-Atlantic Ridge. Letters A, B, C, and D represent locations in the ocean-floor bedrock.



The most recently formed bedrock is found at location

- A) *A*
- B) *B*
- C) *C*
- D) D
- 4) Base your answer to the following question on the map of the Mid-Atlantic Ridge shown below. Points *A* through *D* are locations on the ocean floor. Line *XY* connects locations in North America and Africa.



Samples of ocean-floor bedrock were collected at points *A*, *B*, *C*, and *D*. Which sequence show the correct order of the age of the bedrock from from oldest to youngest?

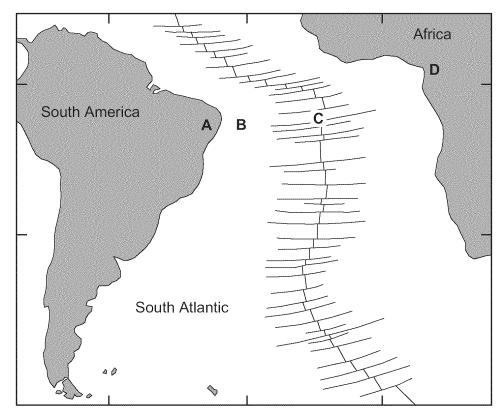
A)
$$D \rightarrow C \rightarrow B \rightarrow A$$

C)
$$C \to B \to D \to A$$

B)
$$A \rightarrow D \rightarrow B \rightarrow C$$

D)
$$A \rightarrow B \rightarrow D \rightarrow C$$

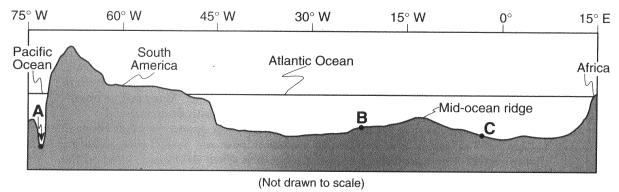
5) Base your answer to the following question on the map below. The map shows the continents of Africa and South America, the ocean between them, and the ocean ridge and transform faults. Locations A and D are on the continents. Locations B and C are on the ocean floor.



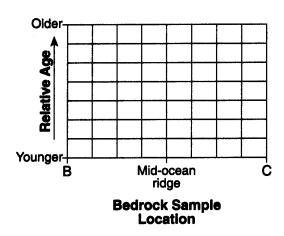
The hottest crustal temperature measurements would most likely be found at location

- A) A
- B) *B*
- C) *C*
- D) *D*

6) Base your answer to the following question on the cross section below, which shows the major surface features of Earth along 25° S latitude between 75° W and 15° E longitude. Points A, B, and C represent locations on Earth's crust.



Bedrock samples were taken at the mid-ocean ridge and points B and C. On the grid, draw a line to show the relative age of the bedrock samples between these locations.



Answer Key geomapappseafloor1

- 1) <u>B</u>
- 2) **D**
- 3) <u>C</u>
- 4) <u>B</u>
- 5) <u>C</u>

