REVIEW: Evidence for Continental Drift

1. What is the best explanation for the fact that coal deposits have been found in Antarctica?

A. The climate of Earth has cooled.

B. A lowering of sea level changed Antarctica to a swamp.

C. Antarctica was once nearer the equator.

D. Early explorers stored coal.

2. Fossils of Mesosaurus, a small freshwater mammal, are found in South America and Africa. Why is Mesosaurus useful evidence for continental drift?

A. Mesosaurus lived all over the world.

B. Mesosaurus only lived in warm climates.

C. Mesosaurus lived in rivers and streams of South America and Africa.

D. It is unlikely that Mesosaurus could swim thousands of kilometres between continents.

3. Where is the true edge of a continent?

A. along the oceanic ridge

B. at the edge of the continental shelf

C. along the current coastline

D. in the deepest part of the ocean

4. Why do volcanoes and earthquakes occur at the edges of tectonic plates?

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5. Explain how a lava flow can become magnetized.

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6. Explain why the crust on either side of the Mid-Atlantic Oceanic Ridge gets gradually older as you move farther away, towards the continents.

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1. C

2. D

3. B

4. Earthquakes and volcanoes are generated where tectonic plates move apart, move together, or slide past each other.

5. When magma is cooling, microscopic crystals of magnetite form. The magnetite crystals all line up with the Earth’s current magnetic field and lava flow becomes magnetized.

6. As the sea floor spreads, magma is intruded along the middle of the oceanic ridge and forms new crust. The next episode of sea floor spreading pushes new magma into the centre of the ridge and moves the older crust on either side away.