



- Mesosaurus fossils are found in South America and Africa
- The edges of many continental plates fit together like "puzzle pieces"
- Rocks located near mid-ocean ridges are younger than rocks further from mid-ocean ridges
- Rocks virtually equidistant from mid-ocean ridges share magnetic polarities in reversed alternating bands
- Heat energy and gravity interact to create convection currents

Synthesize the information above with the information in each answer choice to create the best hypothesis.

- Earth's temperatures increase proportional to depth within the Earth. The resulting A) convection currents provide the forces necessary to move tectonic plates as described by the theory of Plate Tectonics.
 - Earth's continental crust is denser than oceanic crust. The continents are in a
- B) constant repeating cycle of moving together and apart because they can "float" on the oceanic crust as a result of gravity's greater attraction to oceanic crust.
- C) Continental crust is older than oceanic crust. Continental crust is unaffected by the processes of Plate Tectonics.
 - SONAR verified the existence of mid-ocean ridges. Mid-ocean ridges are the
- D) remnants of mountains located on ancient continents that were gradually covered by water as a result of the processes of weathering and erosion.