

Name \_\_\_\_\_

Key

Match the following type of support with the pieces of evidence listed below.

a. changes in climate      b. continents were once connected      c. both a and b

- b 1. Mountains in Karoo, Africa match mountains in Brazil, South America  
b 2. Mesosaurus reptile fossils found in Africa and South America  
c 3. Glacial grooving found on Australia, Antarctica, India, South America and Africa  
b 4. Lystrosaurus and cynognathus reptiles found on India, South America, and Africa  
a 5. Glossopteris fern fossils found on Antarctica  
b 6. Matching coastlines of Africa and South America  
b 7. Fossil evidence can indicate a change in climate. What is a probable cause for this?  
a. Earth has moved closer to the sun.  
b. Continents were in a different location relative to the equator or the poles.  
c. Increased temperatures on Earth due to global warming.  
d. all of the above.

### Review/Study Guide: Continental Drift

- Name and describe the 3 big pieces of evidence that support Wegener's continental drift theory (other than the puzzle-like fit).  
1) matching fossils on different continents  
2) matching rocks/mountain belts  
3) glacial evidence
- The idea that continents have moved horizontally to their current locations is called the Continental Drift theory.
- Name the supercontinent that Wegener proposed split into the continents today. Pangaea
- Name the fossil fern that helps support the theory of continental drift. Glossopteris
- How does the Mesosaurus fossil (a fresh-water reptile) found on South America and Africa support the continental drift theory? could not fly or swim in salt water; had to walk across
- Matching fossils/mountain on different continents is evidence for continental drift. rocks
- How was Wegener's idea received by the scientific community? Why? was rejected because he could not explain How the continents moved.
- What was the one question Wegener could not explain?  
How do the continents move?
- Glossopteris fern fossils were found on Antarctica. What does this say about the climate of Antarctica? Antarctica had to be located closer to the equator where it was warmer
- When do scientists believe Pangaea split apart? 250 million years ago
- What does Pangaea mean? All lands or All Earth
- From lowest to highest temperature, which is the correct order of Earth's layers?  
crust, upper mantle, lower mantle, outer core, inner core
- In general, how does the density of material in Earth's layers change with depth?  
Density and temperature both increase as depth increases
- Which layer of the Earth is the most dense? inner core
- Which layer of the Earth is entirely liquid? outer core
- What two kinds of crust are there? Oceanic and continental
- Which layer of the Earth is the hottest? inner core
- Which layer of the Earth is the thickest? mantle (upper, lower)