

- 1.) What evidence did you use to reconstruct Pangea? How does the evidence you used compare to that used by Wegener?
- 2.) State Wegener's hypothesis of continental drift.
- 3.) Is the evidence that Wegener used to support his hypothesis compelling or not? Explain your answer.
- 4.) Why was Wegener's hypothesis rejected in his time?

**Drifting Continents**

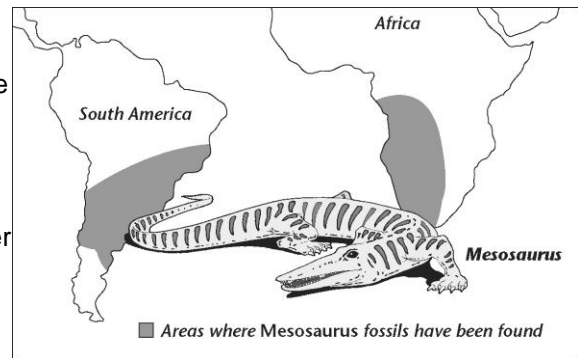
Type of evidence	Example of Evidence
Evidence from 1. _____	a. Mountain ranges in South America and 2. _____ line up b. European coal fields match with similar coal fields in North America
Evidence from fossils	a. Fossils of the plant 3. _____ found in rocks on widely separated landmasses
Evidence from 4. _____	a. Fossils of tropical plants found near Arctic Ocean b. Scratches in rocks made by 5. _____ found in South Africa

**Fill in the blank to complete each statement**

- 6.. All the continents were once joined together in a supercontinent called \_\_\_\_\_, meaning "all lands".
7. A(n) \_\_\_\_\_ is any trace of an ancient organism preserved in rock.
- 8.. Wegener's theory that the continents slowly moved over Earth's surface became known as \_\_\_\_\_.

**The Curious Case of Mesosaurus**

About 265 million years ago, a reptile called *Mesosaurus* lived in just a few places on Earth. This fairly small, lizard-like reptile measured 71 centimeters from its nose to the tip of its tail—or about two thirds of a meter. Its body was long and flexible, perfect for swimming swiftly through the water. *Mesosaurus* was a hunter of small fish and other aquatic animals. Its webbed feet and long tail worked like powerful paddles as it chased and captured its food. Like all other reptiles, *Mesosaurus* breathed air, so it had to return to the surface after hunting underwater. Freshwater ponds and lakes were its habitat.



In the 1800s, scientists began finding fossils of these ancient reptiles, which had long since become extinct. These fossils were found in only two regions, southern Africa and the southern part of south America. The shaded areas on the map show where fossils of *Mesosaurus* have been discovered. This distribution is a curious one—only two regions far from each other and separated by the Atlantic Ocean. What could explain this distribution?

9. Describe the kind of environment in which *Mesosaurus* lived.
10. Is it likely that *Mesosaurus* swam back and forth across the Atlantic Ocean? Explain.
11. What could explain the distribution of *Mesosaurus* fossils?
12. Does the case of *Mesosaurus* support Wegener's theory of continental drift? Explain why or why not.
13. Does the case by itself prove the theory? Explain why or why not.