

A Controversial Idea Wegener's ideas about continental drift were controversial. It wasn't until long after Wegener's death in 1930 that his basic hypothesis was accepted. The evidence Wegener presented hadn't been enough to convince many people during his lifetime. He was unable to explain exactly how the continents drifted apart. He proposed that the continents plowed through the ocean floor, driven by the spin of Earth. Physicists and geologists of the time strongly disagreed with Wegener's explanation. They pointed out that continental drift would not be necessary to explain many of Wegener's observations. Other important observations that came later eventually supported Wegener's earlier evidence.

Fossil Clues Besides the puzzlelike fit of the continents, fossils provided support for continental drift. Fossils of the reptile *Mesosaurus* have been found in South America and Africa, as shown in **Figure 2**. This swimming reptile lived in freshwater and on land. How could fossils of *Mesosaurus* be found on land areas separated by a large ocean of salt water? It probably couldn't swim between the continents. Wegener hypothesized that this reptile lived on both continents when they were joined.

✓ Reading Check How do *Mesosaurus* fossils support the past existence of Pangaea?



Research Visit the Glencoe Science Web site at science.glencoe.com for more information about the continental drift hypothesis. Communicate to your class what you learn.

Figure 2 Fossil remains of plants and animals that lived in Pangaea have been found on more than one continent. How do the locations of *Glossopteris*, *Mesosaurus*, *Kannemeyeri*, *Labyrinthodont*, and other fossils support Wegener's hypothesis of continental drift?

