Fossil Evidence for Pangea

- Lystrosaurus looked a bit like a dinosaur, but lived in a time before dinosaurs. Lystrosaurus fossils show that these creatures once lived on the landmasses of Africa, India, and Antarctica.
- 2. How might the locations of Lystrosaurus fossils be seen as evidence that the landmasses were once together? The land must have been connected for the animal to be on all three landmasses. They are known to be poor swimmers, which means they could not have swam from one landmass to another.
- 3. Mesosaurus looks a bit like an alligator. Mesosaurus were creatures that lived in fresh water, but also spent time on land. Evidence suggests that they were not strong swimmers. How might the fact that the Mesosaurus were fresh water creatures and the location of their fossils give evidence that the landmasses were once together? The Mesosaurus was not a good swimmer, so it could not have gone across the ocean. The ocean is also salt water.
- The fossils of the fern Glossopteris have been found on the landmasses of Australia, Antarctica, India, Africa and South America.
- 5. The seeds of these ferns were very heavy and could not be moved by the wind. How might the plants and their seeds have been transported to the different landmasses?
 The seeds may have been carried over by animals as they moved from land mass to land mass either in their fur or feces.

Rock Evidence for Pangaea

- On the continents of North American, Europe and Africa
 there are mountains that formed at about the same time due
 to a collision 450 million years ago.
- 2. South America and Africa have rocks with similar composition that date back **2 billion** years ago.

Glacier Evidence for Pangaea

- Evidence of ancient glaciers that existed around 250 million years ago can be found on the landmasses of South America, Antarctica, Africa, India and Australia.
- 4. Based on the evidence of glacier, it is likely that the landmass of (South) Africa was located over the south pole at the time of Pangaea.
- 5. As glaciers moved away from the poles, rocks stuck to the bottom of the ice were dragged over the ground. This left scrapes and scratches on rock outcrops that can still be seen today. The scratches show that the direction the glaciers moved was outward, away from the south pole.