Pangaea Puzzle Pieces

- 1. There are some very prolific diamond mines in South Africa. What do you suppose the chances are that one could find diamonds in South America?
- 2. The coal deposits mined in Pennsylvania were formed from plants that grow in tropical climates. What does this suggest about where Pennsylvania was once located? What does this suggest about the locations of North and South America?
- 3. The fit between Africa and South America along their coastlines is not exact. How might the fit be better?
- 4. The dotted line you cut along the northern edge of India is where the Himalayan mountains are located.

How do you think those mountains were formed?

- 5. How would you evaluate the evidence in terms of your fit: Where was the evidence good and where was it bad?
- 6. Does the evidence suffice, in your opinion, to support the theory of Continental Drift? Explain your answer.

The Evidence/Clues

- 1. The paleomagnetic stipes or iron crystal patterns in the rocks of northern Brazil and central Africa are mirror images of each other.
 - 2. There is evidence of glacier activity on both sides of the Atlantic Ocean along the Equator.
 - 3. Glossopteris is a genus of extinct seed fern (a Pteriosperm) whose fossils are found throughout India, South America, southern Africa, Australia, and Antarctica.
 - 4. Mesosaurus was one of the first aquatic reptiles.

 Fossils have been found in South Africa and South America.
 - 5. The age of the rocks in Europe and north America are the same, and get progressively older as you move inland from the ocean.
 - 6. Fossils of Lystrosaurus, a mammal-like reptile, are known from Antarctica, India, and Africa.
 - 7. Mountains in Greenland and Norway are almost identical in their geological structure.
 - 8. The locations of earthquakes and volcanoes are not random. The occur along the margins of the crustal plates.
 - 9. The mountains of Scotland and the Appalachian Mountains of north America are almost identical in their geological structure.
 - 10. The geological structure of southern Senegal and the Amazon Basin are almost identical.

