Name:
Class:

Puzzling Earth

1. Look at the map of Earth. What do you notice about the shapes of South America and Africa?

2. Use colored pencils to create a color code for each of the interesting features of the Earth:
   - the mountain ranges-BLUE
   - animal fossils- GREEN
   - rock layers -YELLOW
   - glacier marking-RED

3. Lystrosaurus was a land animal with short, stubby legs. On what continents are its fossils found?

4. The fossils of Lystrosaurus are of the same species and are found in rocks of the same age/type. Suggest reasons that we see this exact same species in such different locations at the same exact time in Earth's history.

5. Glaciers are rivers of ice that flow down mountains when the snow accumulates more than it melts. In doing so they scratch the rocks below them. Which continents have similar glacial markings in rocks of the same age?

6. Does the current climate of these continents support the formation of glaciers? Explain.

7. Sedimentary rocks are formed by sand, clay, ash or other sediments piling atop one another and cementing together with pressure. Rocks with the same types of sediments of the same ages are found on what continents?

8. What can you conclude about the environment of these two continents that produced sedimentary rocks with the same sediment that have the same age? Why?

9. Mountain ranges are formed as the continents push upwards. What continents have mountain ranges that are the same age?

10. These mountain ranges are all old and no longer pushing upward. With time they will erode and flatten while other mountains around the world ARE still forming. What does the location/condition of these mountain ranges suggest about the continents in the past?

11. What does ALL this evidence suggest about the continents during Earth's past?

12. Color code the continents on the cut out pages using the same coloring scheme. Cut them out and glue them together as the evidence suggests onto the back of your world map. Include the key.

13. Summarize your new map of the Earth. What continents fit together?

14. Alfred Wegner, a German astronomer and meteorologist, hypothesized this is what the Earth looked like 200million years ago and called it Pangaea or all lands. He was ridiculed by his peers. Why is this idea so hard to believe?

15. What OTHER evidence suggests that continents move?