

Chapter 11

LABORATORY MANUAL

● Continental Drift 33

According to the theory of plate tectonics, the continents once formed one landmass named Pangaea. As new crust was formed at the mid-Atlantic rift, the seafloor began to spread apart. According to this theory, the seafloor spreading widened the Atlantic Ocean and separated Pangaea into the continents as we know them today.

Strategy

You will reconstruct a model of Pangaea.

Materials 

2 pieces cardboard (thin)
maps, Figure 33-1
glue or paste
scissors
tape (clear)

Procedure

1. Cut out page 83 and glue it on the cardboard.
2. Cut out the continents.
3. Try to fit the continents into one large landmass.
4. When you have the best fit, tape the pieces to another piece of cardboard. Sketch your version of Pangaea.

Questions and Conclusions

1. Which two continents have the best fit? _____

2. For the best arrangement, which continent forms the core of Pangaea? _____
3. Which continent is now part of Eurasia but, according to theory, was originally a separate continent that moved northward into its present position? _____
4. Why isn't the fit perfect if the continents were once part of Pangaea? _____

5. If the continents were drawn on a Mercator map, would your chances of finding a fit have been improved? Explain. _____

6. Scientists theorize that the continents are still drifting apart. What will be the eventual position of North America with respect to Eurasia? _____

7. How did the Atlantic Ocean form? _____

8. If the continents were once connected, what might be similar about the coastlines where they were connected? _____

Strategy Check

- _____ Can you make the continents fit together into one large continent?
- _____ Can you see how at one time the continents may have formed a super-continent called Pangaea?

9. Describe what is shown by the pictures on the different continents. What do they help prove?

STATION 8
PANGAEA PUZZLE PIECES

