The Continental Drift Hypothesis

A. Pangaea

1. The German scientist ____________________ studied whether Earth’s continents move.

2. Wegener proposed that all continents were once part of a single supercontinent called ____________________.
   a. Over time, Pangaea started breaking apart, and the continents started ____________________ to where they are now.
   b. The hypothesis that suggests that continents are in constant motion on Earth’s surface is ____________________.

3. Wegener observed the similarities of coastlines between continents that were separated by ____________________.

4. The continents that once formed Pangaea have coasts that fit together like pieces of a(n) ____________________.

B. Evidence That Continents Move

1. ____________________ of ancient plants and animals provide evidence for continental drift.

2. Remains of the same plants and animals are present on different ____________________ that are now separated by oceans.

3. Fossils of plants and animals that lived in wet, warm climates are in areas that now have ____________________ climates.

4. Deposits of ____________________ in Antarctica are evidence of continental drift. The fossilized plants in these deposits show that Antarctica was once near the ____________________.

5. Wegener proposed that certain continents—including South America and Australia—were closer to the ____________________ 250 million years ago.
   a. Wegener suggested that these continents were covered by a large ____________________ sheet.
   b. Today, all these continents except one are near the ____________________, where the climate is warm enough to melt ice sheets.
Lesson Outline continued

6. _______________ grooves on continents that currently have warm climates show that these continents once had cold climates.

7. Wegener observed that there were _______________ and rocks on different continents that shared common origins.

8. Evidence of continental drift also includes _______________ on different continents that have similar or identical chemistry, geologic structure, and age.

9. If you pushed North America and Europe together again, their _______________ would look like one long belt with the same rock types.

C. What was missing?

1. Scientists questioned continental drift because it is such a(n) _______________ process. They were unable to _______________ how fast the continents moved.

2. Wegener could not explain what _______________ causes the continents to move.

3. Additional scientific evidence to prove Wegener's hypothesis existed on the _______________ between the drifting continents.

4. Evidence to _______________ continental drift was discussed decades after Wegener's death.