**Science 10**

**12.1 Sheet**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***Instructions: Read pages 506-513 and answer the following questions in point form***

1. What does the continental drift theory state?
2. What gave Wegener his first piece of evidence for continental drift?
3. What is Pangaea?
4. What is a better way to align the continents other than matching up their continental edges?
5. What are three other clues that Wegener used as evidence for continental drift?
6. What did Wegener note about certain mountain ranges and rock ages on opposing continents?
7. Explain how the appearance of the Mesosaurus fossil in South America and Western Africa supports the concept of continental drift.
8. a) Which continents is the Glossopteris fossil found on?
9. Explain how this provides evidence for the existence of Pangaea .
10. What are a two features left behind by retreating glaciers?
11. What is Paleoglaciation?
12. a) Why were scientists puzzled by evidence of glaciers in India and Africa?

b) How is this evidence explained?

1. a) Explain why coal deposits in Antarctica are hard to account for with today’s climate there.

b) What’s the best explanation for the Antarctic coal deposits?

1. Why was Wegener’s theory not accepted immediately?
2. What did scientists NOT KNOW about the earth’s surface in Wegener’s time?
3. What are tectonic plates?
4. Describe volcanoes.
5. Describe earthquakes.
6. Where do earthquakes and volcanoes mostly occur in relation to tectonic plates?
7. What were Oceanographers amazed to find on the bottom of the Atlantic Ocean?
8. What did scientists notice about the age of rocks near the Mid Atlantic Ridge?
9. What was noticed about the amount of sediment on the ocean floor as you moved away from the Mid Atlantic Ridge?
10. How is the earth like a bar magnet?
11. Why do compasses point north?
12. Describe magnetic reversal and explain what scientists think causes it to occur.
13. \*\*If magnetic reversal occurred right now, what direction would a compass point?
14. What is Paleomagnetism?
15. What did scientists notice about the direction of magnetic fields in iron containing rocks on the bottom of the Atlantic Ocean?
16. Make a sketch of figure 12.11 on page 512 and describe the process of sea floor spreading using your diagram.

On your diagram, label the following things: Newer Rock, Older Rock, Magma.

Also, put arrows on your diagram that show the direction the sea floor is moving.

1. What is a hot spot?