Unit 1-2: Intro and Plate Tectonics Study Guide

1.) What is continental drift and who developed this concept?

2.) What are the different types of evidence used to support the theory of continental drift?

3.) What evidence was discovered after Wegener’s death about the bottom of the ocean floor?

4.) What type of boundary describes sea floor spreading? How does this explain continental drift theory?

5.) Draw a cross section (including the inside) of the Earth. Label all of the following parts: Inner core, outer core, mantle, asthenosphere, lithosphere, and crust.

6.) What is it like inside the asthenosphere?

7.) What is it like inside the lithosphere?

8.) What are the three types of plate boundaries? Draw a picture of each.

9.) How do plates move at a divergent boundary?

10.) What features are formed at a divergent boundary?

11.) Where can be find divergent boundaries on the Earth?

12.) What are the three types of convergent boundaries? Draw a picture of each, labeling what type of landform is created.

13.) What features are formed at a continental-continental convergent boundary?

14.) Where can we find a continental-continental boundary on the Earth?

15.) What features are formed at an oceanic-continental convergent boundary?

16.) Where can we find an oceanic-continental convergent boundary?

17.) What features are formed at an oceanic-oceanic convergent boundary?

18.) Where can we find an oceanic-oceanic convergent boundary?

19.) What is a subduction zone? Where is it formed?

20.) Why is Hawaii not an example of an oceanic-oceanic convergent boundary? How was it formed?

21.) What is the difference in the mountains formed at a continental-continental boundary v. a continental-oceanic boundary?

22.) How do plates move at a transform boundary? What is an example of a transform fault and what happens there?

23.) Describe how a convection current works, and draw a picture showing how the heated material in the mantle creates this to pull apart the plates.

24.) What type of boundary is formed when heated material is rising? What type of boundary is formed when material is cooling and sinking?

25.) What is the purpose of the Earth’s magnetic field? How is it formed?

26.) What organism(s) have an internal GPS which connects to the Earth’s magnetic fields for navigation purposes?

27.) Describe two landscapes that existed previously in North Carolina’s geologic history?

28.) Describe how the Appalachian Mountains formed.