Name:

<u>Directions:</u> Go to <u>www.missmorrisgeography.weebly.com</u>, assignments tab, chapter 4- click on Dynamic Earth Interactive to access web-quest. Use the information provided to answer the questions below. Answer questions using complete sentences.

Dynamic Earth Interactive: Introduction

The earths — think it's solid as a rock? Our planet might seem fixed and rigid, but a closer look reveals that it is constantly shifting under our feet. Delve into the earth's interior, learn about its tectonic plates and their movements, and discover how mountains, volcanoes, and earthquakes are formed.

Earth's Structure

1) Create, label and describe a colored diagram of the Earth's structure below.

Plate tectonics

- 2) Describe how the earth looked different 250 million years ago.
- *3)* Alfred Wegener came up with a theory that basically compared earth to a puzzle. What was the theory of each that he published *The Origin of Continents and Oceans?* What example did he have to support his theory?
- *4)* Define the Plate Tectonics Theory.
- *5)* How may the earth look 250 million years from now? From the image draw a conclusion of why it will look this way.

Plates and boundaries

6) Compare and contrast the three types of tectonic plate movement.

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- 7) On the map provided
 - a. Draw out the different tectonic plate boundaries
 - b. Label each plate with its correct name
 - c. Play the tectonics boundaries game. When you get to the boundary type identification part label on your map what kind of boundary the plate has.

Slip, slide, & collide

- 8) Describe the following and how they are created
 - a. Volcanoes
 - b. Island arcs
 - c. Tsunami
 - d. Mid-ocean ridge
 - e. Rifts
 - f. Earthquakes
 - g. Faults
- 9) Play the plates challenge game
 - a. What is happening at the plate boundary where the African plate and the Arabian plate meet?
 - b. What geological event is most likely to occur at this plate boundary in the future?
 - c. What's happening at the plate boundary where the Australian Plate and the Pacific Plate meet?
 - d. What geological event is most likely to occur at this plate boundary?
- 10) Summary: Summarize in a paragraph on the back of your map how plate tectonics affects the geography of the world and how people must alter their lives in different regions of the world. Apply concepts and examples from what you have just learned.