Plate Tectonics Study Guide

Parent signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the Theory of Continental Drift state? \_The continents were once part of a giant landmass that broke apart and drifted to their current positions
2. Who first stated the Theory of Continental Drift? Alfred Wegener
3. What evidence is used to support the Theory of Continental Drift? a. \_earth’s continents like puzzle pieces

b. fossils (Mesosaurus)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ c. \_\_\_\_rocks and minerals\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d. \_\_\_\_matching mountain chains\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. List the continents on earth as they are today \_\_\_\_North America, South America, Europe, Asia, Africa, Antarctica, Australia\_\_\_\_\_\_\_\_\_\_

1. What are continents? \_\_\_\_Earth’s large landmasses\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Crust that makes up the ocean floor is called oceanic crust.
3. Define sea floor spreading \_process that forms new seafloor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Define mid ocean ridges \_\_an ocean floor feature resembling a mountain ridge on land\_\_\_\_\_\_\_
5. Define trench \_\_deep canyon on the ocean floor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Define subduction zone \_place where old oceanic crust is forced back down into an ocean trench\_\_\_\_\_\_\_\_
7. Scientists estimate that the earth is \_4.6 billion\_\_\_\_ years old.
8. The oldest rocks on the ocean floor are about \_\_\_\_160 million years\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years old.
9. Where are many trenches found (hint: in the Pacific Ocean)? \_\_Pacific Ring of Fire\_\_\_\_\_\_\_\_\_\_\_\_
10. Name the evidence scientists use to prove the existence of seafloor spreading a. \_\_ages of fossils\_\_\_\_\_\_\_

b. \_trenches/subduction zones/disappearing crusts c. magnetic fields\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Define convection currents \_movement of a gas or liquid caused by changes in temperature\_
2. What is the Theory of Plate Tectonics? Theory that Earth’s crust is broken into plates that float on the upper part of the mantle
3. How many plates have scientists identified? \_21\_\_
4. Define convergent boundary \_the movement of two tectonic plates TOWARDS each other\_(can form mountains)
5. Define divergent boundary \_the movement of two tectonic plates AWAY from each other (forms rift valleys)
6. Define transform boundary \_\_\_the sliding of two tectonic plates PAST each other \_(causes earthquakes)\_\_
7. Where are convection currents found? \_\_\_\_mantle\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. The movement of tectonic plates at a fault causes \_earthquakes\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. The Hawaiian islands formed when the Pacific plate moved over a \_\_hot spot\_\_\_\_\_\_\_\_\_\_.

Draw and label each picture from your plate tectonics “Draw with Mrs. Wolfe” booklet.

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