**Unit 4 Test: Chapter 7 Plate Tectonics Review Sheet**

**S6E5.a Compare and contrast the Earth’s layers**

**S6E5.f Explain the effects of physical processes (plate tectonics) on geological features.**

**Part 1 (Layers of the Earth)**

1. List the 4 layers of Earth, beginning with the one we’re standing on:
2. List the 3 main layers, and list what each is made of (elements):

**Part 2 (Density and Temperature)**

1. Which layer is the thinnest?
2. List Earth’s layers from least dense to most dense:
3. Which layer is the hottest?

**Part 3 (Crust)**

1. Ocean Crust Continental Crust

Thicker/Thinner \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Main Type of Rock \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Density \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Why does oceanic crust subduct under continental crust (if they collide)?

**Part 4 (CORE)**

1. Outer Core Inner Core

Solid or liquid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Temperature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

More/less pressure \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

More/less dense \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Composition (elements) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 5 (Lithospheric plates)**

1. Sketch the lithosphere and asthenosphere. Which one is completely solid?
2. What makes the lithospheric (tectonic) plates move? (Wegener did not know about these)
3. What lithospheric plate do we live on? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which lithospheric plate is Hawaii on? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 6 (Continental Drift Theory)**

1. What is Pangaea?
2. What evidence did Wegener have that Pangaea existed and the continents started drifting apart millions of years ago?

**Part 7 (Mid-Ocean Ridges)**

14. Sketch the mid-ocean ridge (include the plate movements). Is it a convergent, divergent, or transform boundary?

20. What is the name of the mid-ocean ridge in the Atlantic Ocean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Where has it built up so high that is has created a volcanic island? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 8 (Boundaries)**

21. Which way do plate boundaries move?

>transform boundaries >convergent boundaries >divergent boundaries

22. Why do tsunamis form?

23. Why does California have so many earthquakes? What type of plate boundary is here (at the San Andres Fault)?

28. Specifically, what type of plate boundary formed the Himalayan Mountains (folded mountains)?

29. Why do rift valleys form (like the Red Sea or the Great Rift Valley in Africa)?