Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ONLY if you do not meet proficiency** on Earth’s Interior summative assessment:

to retake you must study this guide, have your parent sign below, bring me this signed Study Guide within a week of the test and schedule a time for the retake.

***My child is ready to retake this test.***

Parent or guardian signature

Period\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **STUDY GUIDE Earth’s Interior**

**Directions-Label: Oceanic Crust, Inner Core, Lithosphere, Outer Core, Lower Mantle, Asthenosphere, Upper Mantle, Continental Crust**



Directions-Label:

Outer Core, Crust, Inner Core, Mantle

1. ***Name*** two examples of evidence that scientists use to discover what the layers of Earth are like. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. ***Describe*** how the pressure and temperature changes if we could travel into the interior of the Earth. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. ***Fill in*** the state of matter (solid or liquid) for each of the 4 main layers of the Earth.

 Crust: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Mantle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Outer Core: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inner Core: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***4. In Figure 2, label the convection currents with the following words:***

 ***sinking, rising, less dense, more dense, cooler, hotter***

Convection Current

 **Figure 2**

a..\_\_\_\_\_\_\_\_\_\_\_\_



**Figure** **1**

Convection Currents in the interior of the Earth.



e.\_\_\_\_\_\_\_\_\_dense

c.\_\_\_\_\_\_\_\_\_ dense

d.\_\_\_\_\_\_\_\_\_

f.\_\_\_\_\_\_\_

b.\_\_\_\_\_\_\_\_

5. What would the molecule particles look like in **Figure 2a above**?

 What would the molecule particles look like in **Figure 2b above**?

6. In **Figure 3 below** pictures Y and Z represents rocks in the earth’s mantle.

 ***Answer the following***:

 Which rock, Y. or Z., represents the most dense rock?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Which rock, Y. or Z., represents the hotter rock?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Which rock, Y. or Z., would rise up into the upper part of the mantle?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Y. and Z. represents rocks in the Earth’s mantle.

Y.



**Figure 3**

Z.