Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Plate Tectonics Review

1. Complete the following information on the Three(3) Main Layers of the Earth

**Word Bank**: crust inner and outer core mantle lithosphere

asthenosphere oceanic continental

* 1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the second and thickest layer of the Earth. The upper two layers of this section affect plate tectonics the most.
  2. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ crust makes up the continents and has a low density.
  3. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the outermost and thinnest layer of the Earth. It is broken into two types: oceanic and continental.
  4. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the second and more plastic layer of the mantle.
  5. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ crust makes up the ocean floor and has a high density.
  6. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the innermost and hottest layers of the Earth. These areas are composed of both molten and solid nickel and iron.
  7. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the top, most solid layer of the mantle. It is often included in the crust.

1. The Earth’s crust is made up of about \_\_\_\_\_\_\_\_\_\_\_\_ different plates that move due to convection of plastic rock in the mantle.
   1. 10
   2. 20
   3. 30
2. This man theorized that the Earth’s continents were once together and slowly drifted apart over 250 million years; a process known as continental drift.
   1. Harry Hess
   2. James Hutton
   3. Alfred Wegener
3. Explain Alfred Wegener’s theory of continental drift using the following word bank:

***Word Bank:*** Pangaea jigsaw puzzle glaciers supercontinent Laurasia Gondwanaland fossils continental drift

1. Harry Hess determined the ocean floor moves like what object?
   1. Escalator
   2. Conveyer belt
   3. Jigsaw puzzle
2. According to Harry Hess, the plates of the Earth move apart at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and come together at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. What is Harry Hess’s theory on plate tectonics called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Oceanic crust \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ under the mantle because it is more dense than the continental crust.
5. The ocean crust is constantly pushing on the continental plate .
   1. True
   2. False
6. What is the location where two plates meet called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. There are two main types of plate boundaries. Name them
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. What is the name for an area where two plates come together? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. What is the name for an area where two plates move apart? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Match the type of convergent plate boundary to the item it creates
    1. Continental – Oceanic \_\_\_\_\_\_\_\_ creates mountains
    2. Oceanic – Oceanic \_\_\_\_\_\_\_\_ creates island arcs
    3. Continental – Continental \_\_\_\_\_\_\_\_ creates volcanoes
11. Explain what a transform boundary is.