**Plate Tectonics Inventory**

1. List the 3 types of plate boundaries and give an example location for each type. (Remember your hand signs)

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

Draw a profile of the plates and the hand motions you have learned

1. What is the driving mechanism that makes the plates move?

Draw it.

1. List 3 good pieces of evidence that support the super continent of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Explain the ages of the ocean floor where seafloor spreading is evident. Create a diagram below that will help explain it.
3. Where is the hottest location in your diagram above?
4. Point out the latitude and longitude of various plate boundaries.
5. What is a Hot Spot? Where are they found? What type of activity is associated with them?
6. Name 3 types of Seismic Waves and how they differ from each other

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

1. What is the difference between the focus and the epicenter?
2. Using the Time/Travel graph in your ESRT
3. Find the distance to and epicenter when given travel time and wave type.
4. Find the travel time when given the wave type and distanced from the epicenter.
5. Find the distance to the epicenter when given the lag time between P and S waves.
6. Find the origin time of the earthquake.
7. Find the epicenter when given **three** observation locations and each of their distances from the epicenter.
8. From an actual seismogram:
9. Find arrival time of a P or an S wave
10. Find the lag time
11. Determine the closest and farthest station from the epicenter. What happens to lagtime the farther away an epicenter is?
12. What is earthquake magnitude?
13. Describe the pattern of earthquake locations around the earth.
14. Describe how increasing temperature, pressure and density effects the speed at which seismic waves travel.
15. How do we infer the model for the Earth’s Interior?
16. Draw and label a piece of Earth pie. (center to the crust)
17. Using the ESRT describe what happens to density, temperature and pressure as one moves deeper into the earth.
18. Define Geosyncline

Isostasy

Orogeny.

1. How do Volcanoes work into the mechanisms of Plate Tectonics?

(subduction, hot spots)

1. Of the three types of Volcanoes which is the most explosive? List the 3 types

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