**ESS Plate Tectonics Test Review**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part 1: On three sheets of paper connected with tape, draw all of the plate features that we have discussed in class. *Hint: plan your diagram on scrap paper before you begin to draw it.*

* Across the bottom half of the sheets, create one continuous cross-section diagram of the Earth’s plates and mantle. This diagram must include all of the plate features (except for a transform boundary) from class *(There are 6: Ocean/Ocean Convergent, Ocean/Ocean Divergent, Ocean/ Continent Convergent, Continent/Continent Convergent, Continent/Continent Divergent, and Ocean Hotspot)*
* Above each plate feature (across the middle of the sheets), label the plate boundary (or hotspot) with its name.
* Across the top of the sheets, draw a satellite view (from above the Earth) of the plate features.

Part 2: Once you have drawn your diagram, make sure that you have met the requirements on this checklist.

* Oceans have water in them.
* Seafloor sediment is included where appropriate.
* All material is shaded appropriately (dark for mafic, light for felsic).
* Volcanoes exist in the correct locations, with the correct shapes and shading.
* Arrows are included to show all plate movement and currents in the mantle.

Part 3: On the cross-section diagram, label all of the following everywhere that they occur.

* Subduction zone
* Mid-ocean ridge
* “New ocean crust forming”
* Composite cone volcano
* Shield cone volcano
* Ocean trench
* Subduction Zone
* Tall non-volcanic mountains
* Hotspot
* Rift valley

Part 4: On the cross-section diagram, label each of the following in one location and describe it as either “more dense” or “less dense.”

* Seafloor sediment
* Mantle
* Continental Crust
* Ocean Crust

Part 5: On the satellite-view diagram, label all of the following everywhere that each occurs.

* Transform boundary
* Tall, non-volcanic mountains
* Mid-ocean ridge
* Ocean trench
* Composite cone
* Shield cone
* Hotspot

Part 6: Explain why the plates and mantle move. On the cross-section diagram…

* Choose one moving plate. Add a label explain why it is moving.
* Choose one rising current in the mantle. Add a label explaining what causes that rising current.
* Choose one sinking current in the mantle. Add a label explaining what causes that sinking current.