



Objectives:

- to learn about types of Plate Boundaries
- to learn about Plate Boundary Interactions
- to familiarize yourself with the Plate Tectonic Map of the World
- to understand and familiarize yourself with past Plate Movement and the supercontinent Pangea

Part 1. Plate Boundary Interactions

Go to the website: <http://www.pbs.org/wgbh/aso/tryit/tectonics/#> and click on "Go directly to Plate Tectonics Activity"

1. Drag each of the arrows in the activity to see the plate interactions. **List and describe** from left to right each type of plate boundary shown in the activity.

Part 2. Plate Tectonic Maps

~~Now go to http://denali.gsfc.nasa.gov/research/lowman/Lowman_map1_lg.jpg and you will see a plate tectonic map of the world. Rest the mouse on the bottom right corner of the map and after a couple of seconds an enlargement icon should appear. Click on this icon to see the map in full size. Now you can use the scroll bars on the side and bottom to maneuver around the map.~~

2. Using the key at the bottom of the map, ^{Google} what is happening in Idaho, tectonically speaking?

3. ~~Scroll over to Asia and locate the Java Trench.~~ ^{Google} This is where the Indian Plate and Eurasian Plate interact. What kind of plate interaction occurs here, that was responsible for the December 26, 2004 tsunami?

4. ^{Google} Scroll over to Iceland and find the Reykjanes Ridge. Do you see how close these volcanoes along this ridge are to Europe? Could they have caused enough smoke and ash to shut down air travel there because of visibility? What type of plate interaction occurs here?

Go to http://emvc.geol.ucsb.edu/2_infopgs/IP3RegTect/dNoPacific.html

5. How does the plate boundary along the west coast of the United States change over time?

Go to <http://emvc.geol.ucsb.edu/forteachers/flashmovies/Pangea.swf> Wait for the movie to download. This is a movie showing how the plates looked around 150 million years ago, when all the continents were together forming the “supercontinent” Pangea, and how the plates moved through time to their present configuration.

5. What continents did North America used to be attached to during Pangea time?

Go to www.gaeearthquakeinsurance.com/fault-lines/ This contains data up to 1999, therefore it does not contain the most recent earthquakes in North Georgia.

6. What is the symbol for small earthquakes? Larger earthquakes?

7. Find Hall County, do you see any earthquakes near (around) there? What counties does the nearest fault line go through?