Name _____ *The Violent Earth, Fall 2005*

Earthquake hazards on tectonic plate boundaries

Due Thursday, Sept. 15th

The purpose of this exercise is to familiarize yourself with the course web page that contains important course information in addition to web links to current natural hazards locally and around the globe.

1) Go to *The Violent Earth* course web page at http://funnel.sfsu.edu/courses/geol302.1

2) Scroll to the bottom of the web page. Along the way, notice the current syllabus, lecture slides and materials from class, links to news about current hazards, and finally the "Web sites of interest" section.

3) Click on either "World" or "U.S." in the line "World and U.S. earthquake information". These links will take you to the U.S. Geological Survey's Earthquake Hazards Program web site.

4) Click on one of the colored squares representing earthquake epicenters in a location that interests you. Continue clicking until you narrow your search to a single earthquake epicenter. Many quakes will link to detailed information (called a "Preliminary Earthquake Report") about the earthquake's magnitude, timing, location, depth, etc. Find an earthquake that lists this detailed information in the geographic region that interests you.

5) Read through the information about that earthquake and list the following information:

Date _____

Time _____

Geographic location or region _____
(list the place name, not latitude/longitude coordinates — you may need to look at a map to name the country or nearest landmass, ocean, etc.)

Magnitude (Richter scale) _____

Depth in the crust _____

Distance to the nearest populated area (big city, etc.) _____

6) Using your knowledge of plate tectonics (and any class materials), decide at which type of plate boundary your earthquake occurred:

Plate boundary type _____

7) In your own words, write a paragraph consisting of at least several sentences (3 or more) describing how the earthquake you investigated fits with the seismology of the appropriate plate boundary characteristics (for example, the seismology of a convergent plate boundary). Use the "Seismology" map and your knowledge from the *Discovering Plate Boundaries* exercise you completed over the first two class meetings. You can find useful maps within the lecture slides and at the *Discovering Plate Boundaries* web site that is linked to the *Violent Earth* course web page.

Your response should not exceed the space in the page below and be <u>easily</u> legible. If you can't write legibly, please type your response.