

### **“It’s *Your* Fault!” earthquake assignment.**

Your earthquake project includes monitoring, research, graphic representation, and classroom presentation of an active fault system located anywhere in the world. Examples include the San Andreas and New Madrid systems.

Radar image of the San Andreas Fault, west of San Francisco Bay.



Photo courtesy of NASA

#### *Choose your fault*

All students must research a unique fault system. You may post your choice on the class website beginning on \_\_\_\_\_ at 9:00 p.m. *Any postings before that time will be removed.*

1. Post your choice by clicking on the “Earthquake Project: Fault Choice” thread on the discussion board.
2. The first student to post a request for any particular fault system may research that system.
3. You may want to post second and third choices in case you don’t get your first choice.
4. All students must have a fault system identified by \_\_\_\_\_.

#### *Research your fault*

Useful research websites include

- United States Geological Survey (USGS) Earthquakes Hazards Program (the “Latest Earthquakes” tab covers the last seven days): <http://earthquake.usgs.gov>
- Earthquake lists at Incorporated Research Institutes for Seismology: [www.iris.edu/seismon/last30.html](http://www.iris.edu/seismon/last30.html)
- USGS Earthquake Notification Service (sign up for e-mail notifications of earthquake activity and set your own parameters for location and strength): <https://sslearnquake.usgs.gov/ens>

#### *Project responsibilities*

1. *Active monitoring*: Set up a discussion board thread on the class website to inform the class of earthquake activity related to your fault.
  - a. Your subject line should be the name of your fault system.

- b. Post introductory material about your fault zone, including the tectonic setting of your fault, any notable historic earthquakes, and recent activity.
  - c. Update the class on your fault zone at least once a week.
2. *Research report*
- a. Your report should be at least three double-spaced pages in size-12 Times New Roman font.
  - b. You must have a separate References page listing at least three resources.
  - c. Your report should cover the tectonics background of your fault system and both the geologic and human history of the system.
    - i. Discuss the different historic events surrounding your fault system. Are there any precautions taken for earthquake activity in the area? Were earthquakes predicted there, or are any predicted now? If predicted, how did the predictions correlate to the damage and actual events?
    - ii. Refer to your timelines to help you discuss the difference between the geologic scale of events and the historical human impact of your fault system.
3. *Timeline construction*
- a. Prepare two timelines for your fault system. One timeline should represent the important events or milestones of your fault system on a *geologic* time scale. The second timeline should represent the important events or milestones of your fault system on a *historic* or human time scale. You may hand-draw your timeline or use a computer.
4. *Classroom presentation*
- a. Summarize your research and report the interesting information you learned to the class. Include information about the tectonics setting and a discussion of your two timelines.
  - b. You may include a slideshow presentation or handouts.

### *Summary*

You will provide the class with introductory material and a minimum weekly update on your fault zone. Your research paper and your timelines are due \_\_\_\_\_. The project is scored according to four areas: active monitoring (25 points), research paper (60 points), timeline construction (40 points), and classroom presentation (25 points).