

Name _____

Investigation 1: Geohazards and Me: What geologic hazards exist near me? Which plate boundary is closest to me? Investigation Sheet

<http://www.ei.lehigh.edu/learners/tectonics>

Read **all** instructions on your handout and answer **each** question in complete sentences where appropriate.

1. Fill out the following table with information about the recent earthquake nearest you.

Distance from epicenter to your location	
Location (latitude-longitude)	
Magnitude	
Focal depth of the earthquake	
Date of the earthquake	

2. Do you remember hearing about any recent earthquakes that occurred near you?

Did you feel it? What was the epicenter of that earthquake?

3. Fill out the following table with information about the **historic earthquake M > 8.0** nearest you.

Distance from epicenter to your location	
Location (latitude-longitude)	
Magnitude	
Date of the earthquake	

4. Fill out the following table with information about the volcano nearest you.

Distance from volcano to your location	
Location (latitude-longitude)	
Type of volcano	
Date of last known eruption	
Elevation of the summit	

5. Which are nearer to you, earthquake or volcano hazards?

6. What is the distance to the nearest plate boundary from your location?

7. What kind of geologic hazards are there on this plate boundary?

8. What pattern exists between earthquake locations and plate boundaries?

9. What pattern exists between volcano locations and plate boundaries?

10. What is the seismic hazard risk in Los Angeles, CA?

11. What is the seismic hazard risk in Washington, D.C.?

12. Which is more hazardous: Los Angeles, CA or Washington, D.C.? Support your claim with evidence from the GIS.

13. List 3 countries outside of the United States that have high seismic hazards. (Helpful hint: In Map Layers, select the Base Map: **Aerial with Labels** to view country names).

14. How are geologic hazards related to plate tectonics?