

Lab Report – Locating an Earthquake

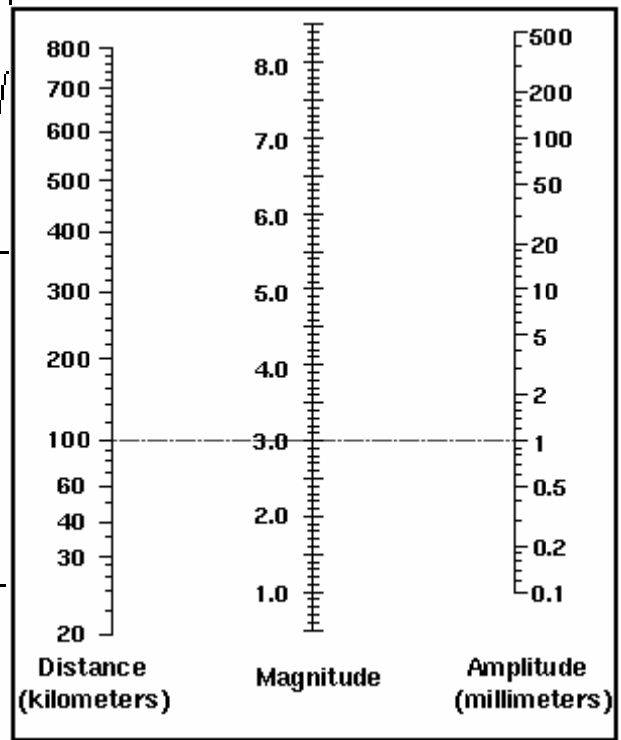
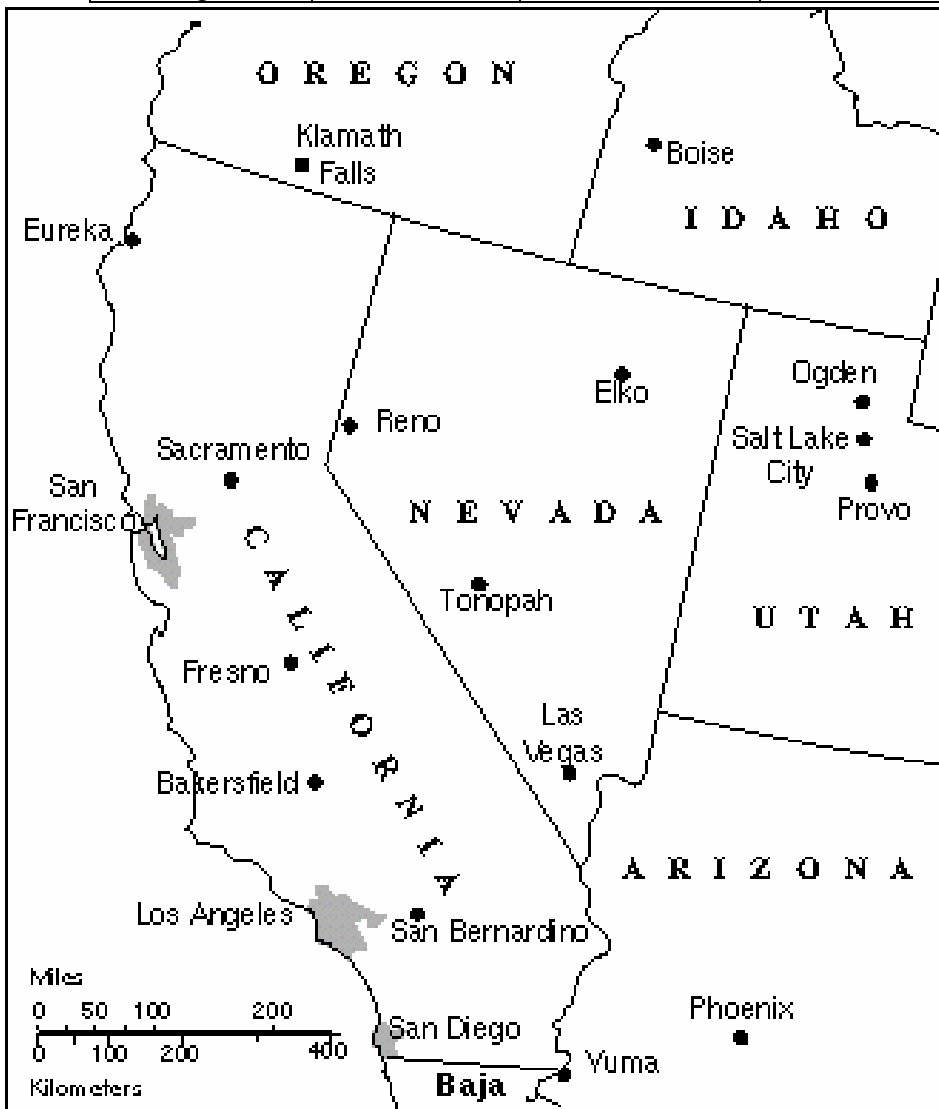
PART I: Global Distribution of Earthquakes

1. Do you see any correlation between the location of plate boundaries and the occurrence of earthquakes? Provide at least two examples.

PART II: Locating the Epicenter

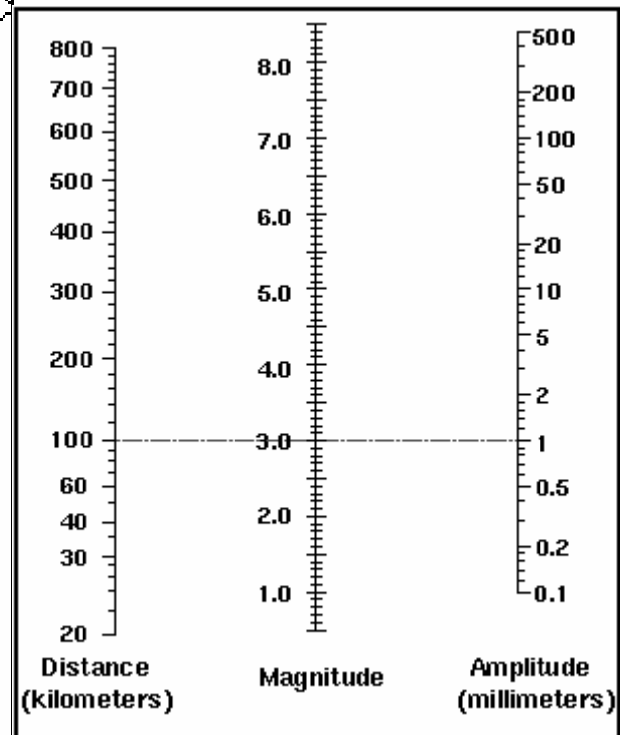
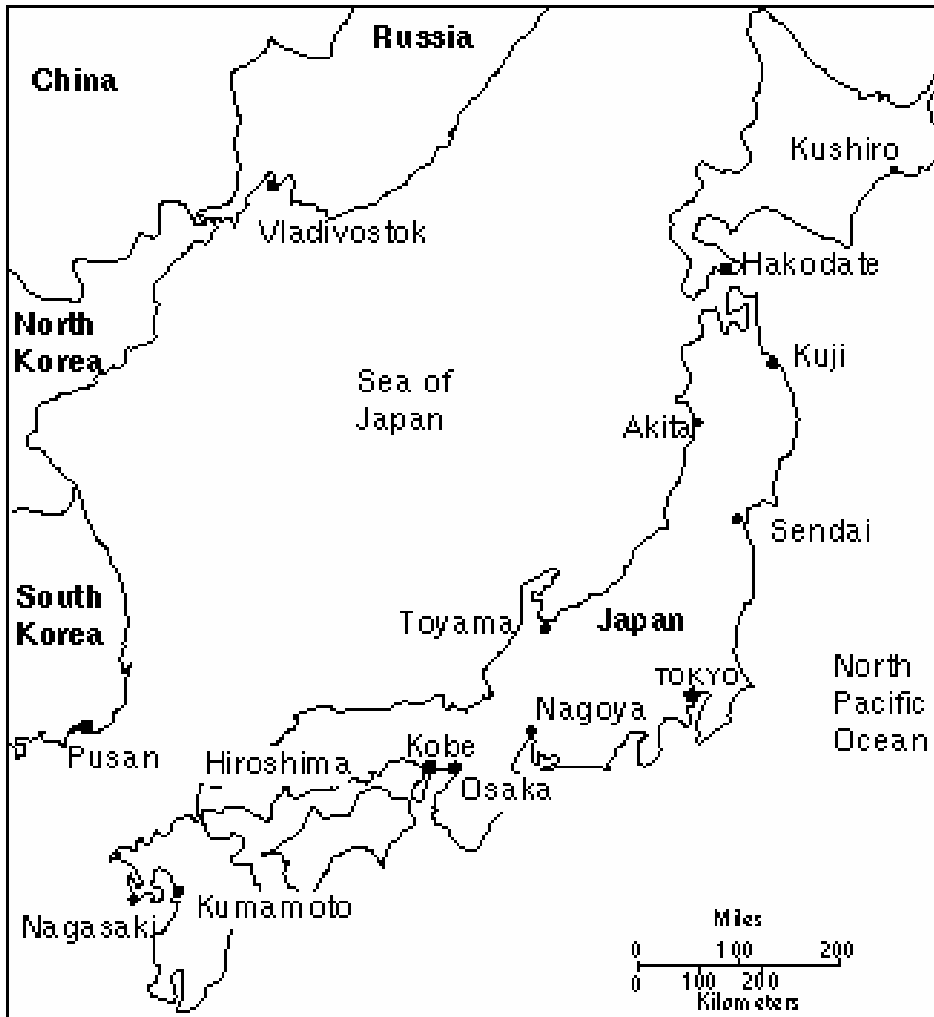
San Francisco Area Earthquake

Station	S-P Interval (s)	Distance (km)	Radius (cm)	Amplitude (mm)	Magnitude
Eureka, Ca					
Elko, Nv					
Las Vegas, Nv					



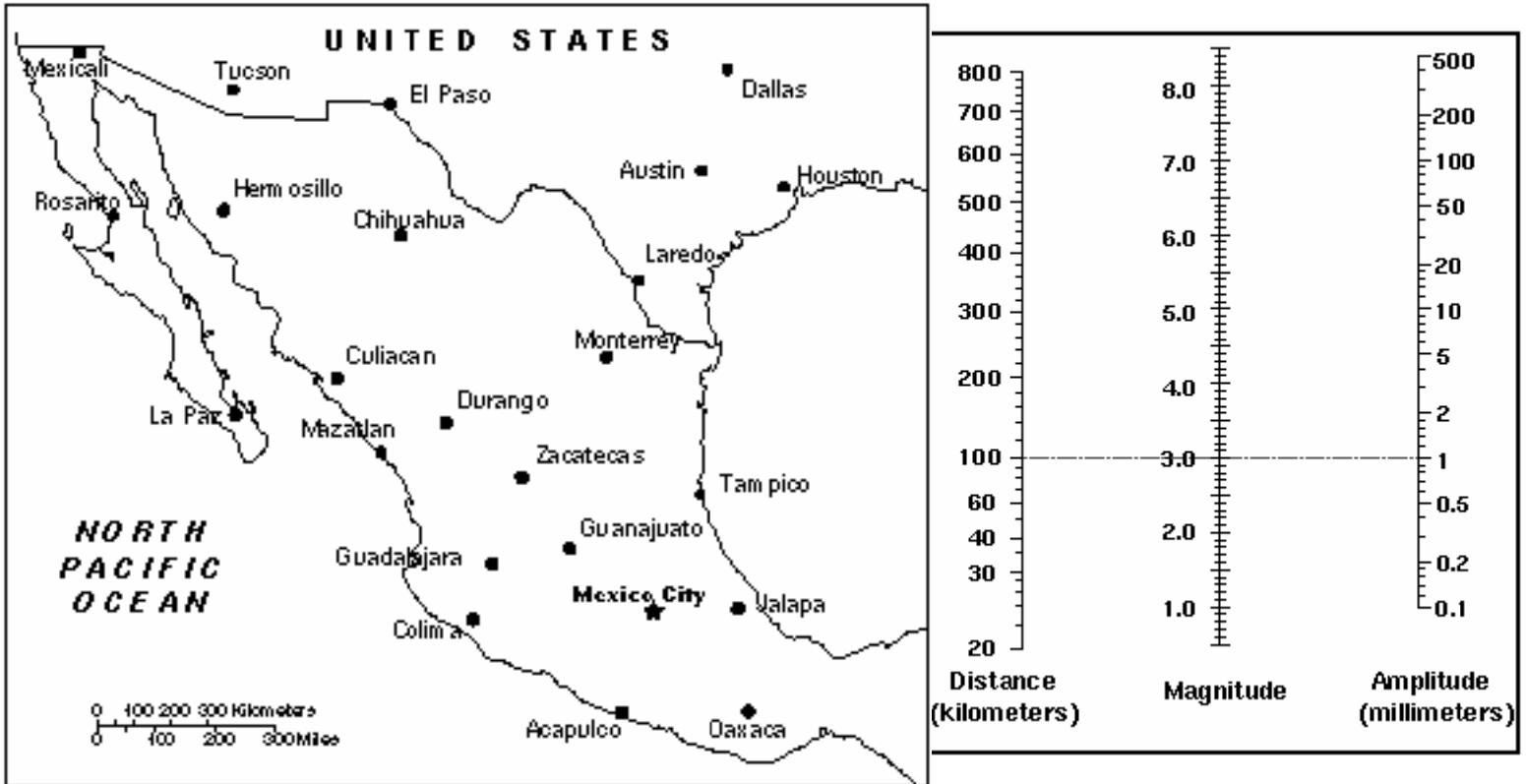
Japan Earthquake

Station	S-P Interval (s)	Distance (km)	Radius (cm)	Amplitude (mm)	Magnitude
Pusan					
Tokyo					
Akita					



Mexico Earthquake

Station	S-P Interval (s)	Distance (km)	Radius (cm)	Amplitude (mm)	Magnitude
Chihuahua					
Mazatlan					
Rosarito					



PART IV: Effects of Population Density on Magnitude of damages caused by an earthquake

1. Distance in miles from the epicenter of **M 7 – 2010 Jan 12, Haiti Region** to Port au –Prince: _____ miles.
2. Based on the population density of each area, do you think that population density was a determinant factor for the difference in fatalities for the 2010 Haiti and Chile earthquakes?
3. What other factors do you think are important to minimize the number of fatalities caused by earthquakes?