Name Period Date

Unit	Handout	
3	76	*Lesson 4: Plotting Earthquakes to Identify Patterns*

Purpose:	To identify patterns in where earthquakes occur
Guiding Questions:	**-** Which areas on our planet experience earthquakes? **-** How is the location of earthquakes related to other geologic features?

Instructions. Use pages 52-53 to plot several earthquakes onto your large map. You will also plot these earthquakes onto a smaller map that will be shared with the class. To plot the earthquakes, use the latitude and longitude. Follow the instructions on step 5, pages 51 for what to do.

Questions. After plotting your earthquakes and sharing with the class, answer the following questions.

7a. On (or near) which coast of North America do most earthquakes occur?

7b. Which states in the United States are most earthquake prone?

7c. Are the earthquakes located within specific ares or scattered throughout the world?

7d. If the earthquakes are in specific areas, how would you describe those areas? (What patterns do you see in where earthquakes occur?

Plotting Recent Earthquakes. Using a laptop or iPad, visit http://earthquake.usgs.gov/earthquakes/map/ Select several earthquakes and record information about them below. Then, plot that earthquake on your large map using the blue dots. Label each dot with the same letter provided in the table below. You do not need to complete every line of this table. You may select any of the earthquakes provided.

Letter	Date	Lat.	Long.	Depth	Location
A					
B					
C					
E					
F					
G					
H					
I					
J					
K					

Questions.

1. Zoom out so you can see the entire map on the website. What patterns do you notice with the earthquakes? Are they similar to patterns you noticed in the first part of this activity?

2. What do the red lines on the map represent?

3. Is there a relationship between the red lines and to the location of the earthquakes? If so, what is it?