Earthquake mapping activity

Day 2 lesson overview: Students will plot EQ data and infer the locations of the tectonic plate boundaries based on the patterns of dots.

- 1. Visit USGS.gov to access information about the most recent earthquakes, along with the locations (latitude and longitude).
- 2. Provide each pair of students with a data sheet with the locations of 10 earthquakes, a world map, a transparency sheet, and a dry erase marker. Students should place the transparancy over the world map and locate their 10 earthquakes on the world map by representing each earthquake as a dot.
- 1. If needed, provide a brief review of the cardinal directions and how to use latitude and longitude. Model how to find a few earthquakes as a whole class prior to students working in pairs.
- 2. Once all students have finished, have students place all of their transparencies on top of one map. A pattern of dots from the class's data should appear. Ask students questions such as:
 - a. What do you observe?
 - b. Do you notice any patterns?
 - c. Let's draw some lines to connect the dots.
 - d. If you lived on the line, would it be likely that this location would experience earthquakes? Why do you think so?