



Worksheet

Visualizing Relationships between Earthquakes, Volcanoes, and Plate Boundaries

Part I: Comparing earthquake and volcano locations

You will need:

- Internet access (Mac and PC-compatible) or the map packet
- Dry erase pens and transparency paper with map of Western U.S. **OR** color pencils

Instructions

Break into teams of two. In your teams, designate one person to study the Earthquake map and one person to study the Volcano map. Separately study your designated map and answer the questions below.

Follow the computer instructions on how to use EarthScope Voyager Jr. or study the maps showing Earthquakes and Volcanoes of the Western United States provided from the map packet.

Earthquake Map Questions: Study where earthquakes are and are not located.

Sketch the approximate locations of several earthquake "clusters" using a dry erase pen on the **map of the western United States** printed on a transparency or from the last page of the worksheet.

Q: How are earthquakes distributed? If there is a pattern, how would you describe it? Where are there no earthquakes? Are they located near the edges of the continents, mid-continent, in the ocean?

Q: At what depth do the earthquakes occur?

Volcano Map Questions Study where volcanoes are and are not located.

Sketch the approximate locations of several volcanoes using a dry erase pen on the **map of the western United States** printed on a transparency or from the last page of the worksheet.

Q: How are volcanoes distributed? Where are there no volcanoes? Are they located near the edges of the continents, mid-continent, in the ocean?

Q: If there is a pattern, how would you describe it?

