**Mapping Earthquakes and Volcanoes Skills Lab**

**Problem**: Research patterns in the locations of earthquakes and volcanoes?

Hypothesis: If earthquakes and volcanoes are on plate boundaries then there should be a pattern for the locations of the earthquakes and volcanoes.

**Materials**

Outline of the world map showing longitude and latitude; 2 pencils of different colors

Earthquakes = \_\_\_\_\_\_\_\_\_\_\_\_ Volcanoes = \_\_\_\_\_\_\_\_\_\_\_\_\_

**Procedure:**

**1.** Use the information in the data table to mark the location of each earthquake on the world map. Use the color you assigned for earthquakes to plot a point at each earthquake location.

**2.** Use the information in the data table to mark the location of each volcano on the world map. Use the color you assigned for volcanoes to plot a point at each volcano location.

**3.** Use the color you assigned for earthquakes to “connect the dots” (Make the connections as smooth as possible).

4. Use the color you assigned for volcanoes to “connect the dots” (Make the connections as smooth as possible).

**Analyze and Conclude**

1. How are earthquakes distributed on the map? Are they scattered evenly or concentrated in zones?
2. How are volcanoes distributed? Are they scattered evenly or concentrated in zones?
3. From your data, what can you infer about the relationship between earthquakes and volcanoes?
4. Suppose you added the locations of additional earthquakes and volcanoes to your map. Would the overall pattern of earthquakes and volcanoes change? Explain in writing why you think the pattern would or would not change.