| Name |
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## LAB: Locating Patterns of Earthquake and Volcano Distribution

## **Problem**

What is the path of earthquake and volcano distribution worldwide?

Materials (per student)

Earthquake and volcano locations World map showing latitude and longitude 2 different colored pencils

## **Procedure**

- 1. Using the information in the table on earthquakes, plot the location of each earthquake on the map on the following page. Make a dot on the map for each earthquake using one of the colored pencils.
- 2. Using the information in the table on volcanoes, plot the location of each volcano on the map on the following page. Make a dot on the map for each volcano using the other colored pencil.
- 3. If directed by your teacher, also plot the location of recent earthquakes and volcanoes. Remember to use the same colored pencils as before.
- 4. Answer the questions on the back of this paper.

| Earthquakes |          | Volcanoes |          |
|-------------|----------|-----------|----------|
| Longitude   | Latitude | Longitude | Latitude |
| 120°W       | 40°N     | 150°W     | 60°N     |
| 110°E       | 5°S      | 70°W      | 35°S     |
| 77°W        | 4°S      | 120°W     | 45°N     |
| 88°E        | 23°N     | 61°W      | 15°N     |
| 121°E       | 14°S     | 105°W     | 20°N     |
| 34°E        | 7°N      | 75°W      | 0°       |
| 74°W        | 44°N     | 122°W     | 40°N     |
| 70°W        | 30°S     | 30°E      | 40°N     |
| 10°E        | 45°N     | 60°E      | 30°N     |
| 85°W        | 13°N     | 160°E     | 55°N     |
| 125°E       | 23°N     | 37°E      | 3°S      |
| 30°E        | 35°N     | 145°E     | 40°N     |
| 140°E       | 35°N     | 120°E     | 10°S     |
| 12°E        | 46°N     | 14°E      | 41°N     |
| 75°E        | 28°N     | 105°E     | 5°S      |
| 150°W       | 61°N     | 35°E      | 15°N     |
| 68°W        | 47°S     | 70°W      | 30°S     |

| LAB: | Locating Patterns of Earthquake and Volcano Distribution (continued)                        |
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| Ques | tions to answer:  |
| 1.   | Are earthquakes scattered randomly over the surface of the earth or are                     |
|      | they concentrated in definite zones?  |
| 2.   | Are volcanoes scattered randomly or concentrated in definite zones?                         |
| 3.   | Are most earthquakes and volcanoes located near the edges or near the center of continents? |
| 4.   | Are there any active volcanoes located near your home?                                      |
| 5.   | Has an earthquake occurred near your home?  |
| 6.   | Describe any patterns you observe in the distribution of earthquakes and                    |
|      | volcanoes.  |
| 7.   | What relationship exists between the locations of earthquakes & volcanoes?                  |
|      |   |

