Name _____ Date _____ Class _____

CHAPTER 3 SKILLS LAB

Interpreting Data

Mapping Earthquakes and Volcanoes

In this lab, you will interpret data on the locations of earthquakes and volcanoes to find patterns.

◆ Problem

Is there a pattern in the locations of earthquakes and volcanoes?

◆ Materials

outline world map showing longitude and latitude
4 pencils of different colors

◆ Procedure

1. Use the information in the table on page 92 to mark the location of each earthquake on the world map on page 93. Use one of the colored pencils to draw a letter E inside a circle at each earthquake location.
2. Use a pencil of a second color to mark the locations of the volcanoes on the world map. Indicate each volcano with the letter V inside a circle.
3. Use a third pencil to lightly shade the areas in which earthquakes are found.
4. Use a fourth colored pencil to lightly shade the areas in which volcanoes are found.

◆ Analyze and Conclude

Write your answers on a separate sheet of paper.

1. How are earthquakes distributed on the map? Are they scattered evenly over Earth's surface? Are they concentrated in definite 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. **Apply** Based on the data, which area of the North American continent would have the greatest risk of earthquake damage? Of volcano damage? Why would knowing this information be important to urban planners, engineers, and builders in this area?

Name Do not write on sheet Date _____ Class _____

SKILLS LAB *(continued)*

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
175° E	41° S	175° E	39° S
121° E	17° N	123° E	38° N

◆ More to Explore

On a map of the United States, locate active volcanoes and areas of earthquake activity. Determine the distance from your home to the nearest active volcano.

West Longitude

East Longitude

World Map

Mercator projection

East Longitude