



INVESTIGATING OUR DYNAMIC PLANET

- a) Can any mountain have a volcano erupt from it?
 - b) Do earthquakes and volcanoes always occur in the same area?
 - c) Do earthquakes and volcanoes always occur at the same time?
2. Look closely at *Table 1*. The data table shows recent earthquakes from around the world. The data was collected at regional seismograph stations.

Discuss the terms used in the table. Describe in your journal what the following terms mean and how they relate to the table.

- a) Latitude
- b) Longitude
- c) Depth
- d) Magnitude

Table 1: Subset of Seismograph Station Results for One Week

Latitude	Longitude	Depth (kilometers)	Magnitude (Richter Scale)	Occurrence Region
47°N	151°E	141	5.2	Kuril Islands
28°S	178°W	155	5.0	Kermadec Islands
30°N	52°E	33	4.2	Iran
36°N	140°E	69	4.7	Honshu, Japan
34°N	103°E	33	4.3	Gansu, China
40°S	177°E	27	4.8	New Zealand
0°N	36°E	10	4.6	Kenya, Africa
38°N	21°E	33	4.6	Ionian Sea
16°N	47°W	10	4.7	N. Mid-Atlantic Ridge
6°S	147°E	100	4.4	New Guinea
55°N	164°W	150	4.5	Unimak Island, Alaska
24°S	67°W	176	4.1	Argentina
13°N	91°W	33	4.2	Guatemala coast
4°N	76°W	171	5.6	Colombia
40°N	125°W	2	4.5	N. California coast
5°S	102°E	33	4.4	S. Sumatra, Indonesia
44°S	16°W	10	4.6	S. Mid-Atlantic Ridge
51°N	179°E	33	4.4	Aleutian Islands
15°S	71°W	150	4.2	Peru
49°N	128°W	10	4.7	Vancouver, Canada
35°N	103°E	33	4.3	Gansu, China