

Name _____

Date _____ Per _____

Plotting Earth's Volcanoes and Earthquakes

The data below represent worldwide volcano and earthquake locations given by their latitude and longitude. Using a world map and two different color pencils, plot the location of each earthquake in one color and each volcano in the other color. The goal of this investigation is to map the locations of these tectonic events to see what relationships can be deduced.

Worldwide Volcanic Activity – Week of Oct 1 – Oct 7, 2014 <http://volcano.si.edu/>

	<u>Location</u>	<u>Latitude</u>	<u>Longitude</u>
1) Bardarbunga	Iceland	65 N	18 W
2) Copahue	Central Chile-Argentina	38 S	71 W
3) Lewotobi	Flores Island (Indonesia)	9 N	1223 E
4) Mayon	Luzon (Philippines)	13 N	124 E
5) Ontakesan	Honshu (Japan)	36 N	137 E
6) Sheveluch	Kamchatka (Russia)	57 N	161 E
7) Sinabung	Indonesia	3 N	98 E
8) Aira	Kyushu (Japan)	32 N	131 E
9) Asosan	Kyushu (Japan)	33 N	131 E
10) Dukono	Halmahera (Indonesia)	2 N	128 E
11) Karymsky	Kamchatka (Russia)	54 N	159 E
12) Kilauea	Hawaiian Islands (USA)	19 N	155 W
13) Kuchinoerabujima	Ryukyu Islands (Japan)	30 N	130 E
14) Shishaldin	Fox Islands (USA)	55N	164 W
15) Stromboli	Aeolian Islands (Italy)	39 N	15 E
16) Tungurahua	Ecuador	1 S	78 W
17) Zhupanovsky	Kamchatka (Russia)	54 N	159 E

Worldwide Earthquakes Oct 10, 2014 - <http://earthquake.usgs.gov/earthquakes/map/>

<u>Latitude</u>	<u>Longitude</u>		
a) 36 N	118 W	j) 40 N	123 W
b) 64 N	148 W	k) 33 N	116 W
c) 6 S	154 E	l) 65 N	149 W
d) 36 N	97 W	m) 33 N	117 W
e) 6 S	130 E	n) 40 N	123 W
f) 61 N	152 W	o) 38 N	119 W
g) 37 N	119 W	p) 38 N	119 W
h) 38 N	123 W	q) 37 N	119 W
i) 34 N	117 W	r) 61 N	152 W
		s) 61 N	147W

ANALYSIS:

1. Discuss the distribution of earthquakes and volcanoes over the surface of the Earth. Are they scattered at random or are they concentrated in zones? Describe your observations.

2. Discuss the distribution earthquakes and volcanoes located in relation to the continents. Are they near the middle of continents or....? Describe.

3. Using reference books or maps, draw the major crustal plates of the Earth on your world map. Label the names of the plates.

4. Discuss the distribution of earthquakes and volcanoes in relation to the crustal plates. Are they scattered all over the plates or is there a pattern? Describe.



