

MAPPING EARTHQUAKES

MAPPING THE DATA

1. This chart lists some of the important earthquakes that occurred around the world between April 11 and May 8, 2014. Use online and classroom atlases, and other resources, to plot the location of each earthquake on **BLM 0.9 Political Outline Map of the World**. Show each location with a coloured dot and label the earthquake's magnitude.

Date	Location	Latitude	Longitude	Magnitude	Depth
May 8	6 km WSW of Tecpán de Galeana, Mexico	17.2°N	100.7°W	6.4	17.1 km
May 8	0 km SW of Cudahy, California, USA	34.0°N	118.2°W	3.3	13.9 km
May 5	13 km NNW of Phan, Thailand	19.7°N	99.7°E	6.1	6.0 km
May 4	32 km E of Ito, Japan	34.9°N	139.3°E	6.0	153.0 km
May 4	494 km SSW of Ndoi Island, Fiji	24.6°S	179.1°E	6.6	527.0 km
May 1	204 km WNW of Ile Hunter, New Caledonia	21.5°S	170.4°E	6.6	106.0 km
April 24	120 km S of Port Hardy, BC, Canada	49.6°N	127.7°W	6.5	10.0 km
April 19	57 km SW of Panguna, Papua New Guinea	6.7°S	155.1°E	6.6	29.0 km
April 18	58 km WSW of Panguna, Papua New Guinea	6.6°S	155.3°E	4.7	55.0 km
April 18	34 km WNW of Tecpán de Galeana, Mexico	17.4°N	101.1°W	7.2	24.0 km
April 15	366 km ENE of Bouvet Island, Bouvet Island	53.5°S	8.7°E	6.8	11.2 km
April 13	75 km S of Kirakira, Solomon Islands	11.1°S	162.0°E	6.6	10.0 km
April 13	11.5 km S of Kirakira, Solomon Islands	11.5°S	162.0°E	7.4	39.0 km
April 12	93 km SSE of Kirakira, Solomon Islands	11.3°S	162.0°E	7.6	22.6 km
April 11	22 km SE of Nandaime, Nicaragua	11.6°N	86.0°W	6.6	135.0 km
April 11	78 km SW of Panguna, Papua New Guinea	6.8°S	154.9°E	6.5	20.0 km
April 11	56 km WSW of Panguna, Papua New Guinea	6.6°S	155.0°E	7.1	60.0 km

2. Shade the area on your world map that is the Ring of Fire. You can remind yourself of the location of the Ring of Fire by looking at Figure 1.18 on Student Book page 34.
3. Your map already has a scale and a compass rose. Give your map a title and a legend.

ANALYSIS OF YOUR COMPLETED MAP

1. Your map shows areas of important earthquakes. Describe the pattern that your map shows.

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MAPPING EARTHQUAKES *(CONTINUED)*

2. Describe how closely the pattern of earthquakes on your map matches the Ring of Fire.

3. Identify places where you thought there would be earthquakes but there were not. Why do you think there are not any earthquakes at those locations?

4. Explain why earthquakes are common around the Ring of Fire. _____

5. **Bonus Question:** An earthquake in California of only 3.3 magnitude took place on May 8. It is included among the “important earthquakes” on the table even though it is much smaller than all the other quakes listed. Why do you think it was included?
