

VOLCANOES!

Activity Sheet 4.2a The Snowline

In some mountains, there are areas where snow and ice stay all year. The elevation above which the snow stays all year is called the **snowline**.

The snowline differs on volcanoes depending on how far a volcano is from the Equator and the volcano's elevation.

What to do — Part A

1. Label the volcanoes listed below on the blank map. (All the volcanoes are north of the Equator.) Write the volcano's elevation on the map.

Volcano	Location	Elevation in meters
1. Mount Vesuvius	40N 14E	1,281 (Italy)
2. Mount Etna	37N 15E	3,350 (Italy)
3. Kilauea	19N 155W	1,222 (USA)
4. Mauna Loa	8N 157W	4,170 (USA)
5. Mount Rainier	46N 121W	4,392 (USA)
6. Mount Fuji	35N 138E	3,776 (Japan)
7. Mount Pelée	14N 61W	1,397 (Martinique)
8. Katmai	58N 154W	2,047 (USA)
9. Lassen Peak	40N 121W	3,187 (USA)
10. Parícutin	19N 102W	1,780 (Mexico)
11. Surtsey	63N 20W	155 (Iceland)
12. Sunset Crater	35N 111W	2,447 (USA)
13. Mount St. Helens	46N 122W	2,549 (USA)
14. Nevada del Ruiz	4N 75W	5,321 (Colombia)

2. Which volcano is closest to the Equator?

What is its latitude?

3. Which volcano is farthest from the Equator?

What is its latitude?

4. Would a volcano at 10°N be closer to the Equator than a volcano at 45°N?

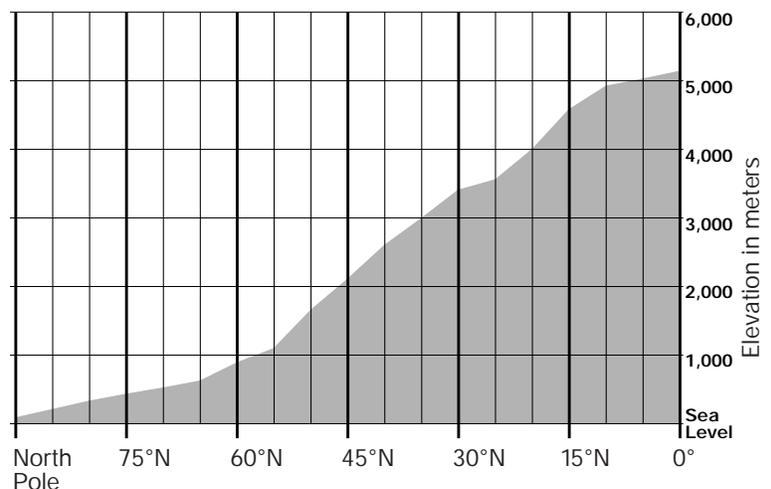
(Latitude shows us distance from the Equator.)

What to do— Part B

Use the Snowline Diagram to find out which of the volcanoes on your map will have snow on them during the summer.

1. For volcano #1, find its latitude along the bottom of the chart. Put a mark there.
2. For volcano #1, find its elevation in meters along the right hand side. (Round off to the nearest thousand.) Put a mark there.
3. Put a mark where the two points come together. Is the mark above the dark area of the diagram? If yes, that volcano is likely to have snow on it during the summer.
4. If the volcano is likely to have snow on it during the summer, put a * next to it on the list of volcanoes.
5. Repeat steps 1-4 for all of the volcanoes on the list.

Snowline Diagram



This diagram shows approximately how the elevation of the snowline changes with latitude.