

VOLCANOES!

Activity Sheet 3.2a In the Rain Shadow

Mount St. Helens is one of the volcanic mountains that make up the Cascade Range. The Cascade Range is about 1,130 kilometers (700 miles) long. It is located about 160 to 240 kilometers (100 to 150 miles) inland from the coast of the Pacific Ocean. The location of the mountains

affects the climate in the Pacific Northwest. Cities located on the western side of the mountains receive different amounts of precipitation (rain and snow) than cities located on the eastern side of the mountains.

What to do

1. On the map, the symbol ▲ marks a volcanic mountain in the Cascade Range. Find each of the volcanoes listed below. Then, on the map draw a line connecting all the ▲ symbols. The line you have drawn will show you the approximate location of the Cascade Range.

Mt. Adams	Mt. Jefferson
Mt. Baker	Lassen Peak
Glacier Peak	Mt. Rainier
Mt. Hood	Mt. Shasta
	Mount St. Helens

2. On the map, find the **west** side of the Cascade Range and write the letter “**W.**” Then find the **east** side of the Cascade Range and write the letter “**E.**” (Hint: the Pacific Ocean is to the west of the Cascade Range.)
3. On the map, each of the following cities is marked with the symbol ●.

Name	Annual Precipitation
Burns, Oreg.	47 centimeters (12 inches)
Eugene, Oreg.	169 centimeters (43 inches)
Olympia, Wash.	201 centimeters (51 inches)
Pendelton, Oreg.	47 centimeters (12 inches)
Portland, Oreg.	146 centimeters (37 inches)
Salem, Oreg.	158 centimeters (40 inches)
Seattle, Wash.	154 centimeters (39 inches)
Spokane, Wash.	71 centimeters (18 inches)
Tacoma, Wash.	146 centimeters (37 inches)
Walla Walla, Wash.	62 centimeters (16 inches)
Yakima, Wash.	32 centimeters (8 inches)

Find each city on the map. Is it **east** or **west** of the Cascade Range? On the chart below, list each city in either the “Eastern Cities” or “Western Cities” column and write in the annual precipitation for each city.

Western Cities

Eastern Cities

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. Find the average amount of precipitation that the “Eastern Cities” get and the “Western Cities” get.

Average precipitation for “Eastern Cities”: _____

Average precipitation for “Western Cities”: _____

5. Do cities on the east or west side of the Cascade Range receive more precipitation? _____