

Volcanoes for Little Eyes



Patrick Nurre

The Northwest Treasures Curriculum Project
Building Faith for a Lifetime of Faith

Volcanoes for Little Eyes

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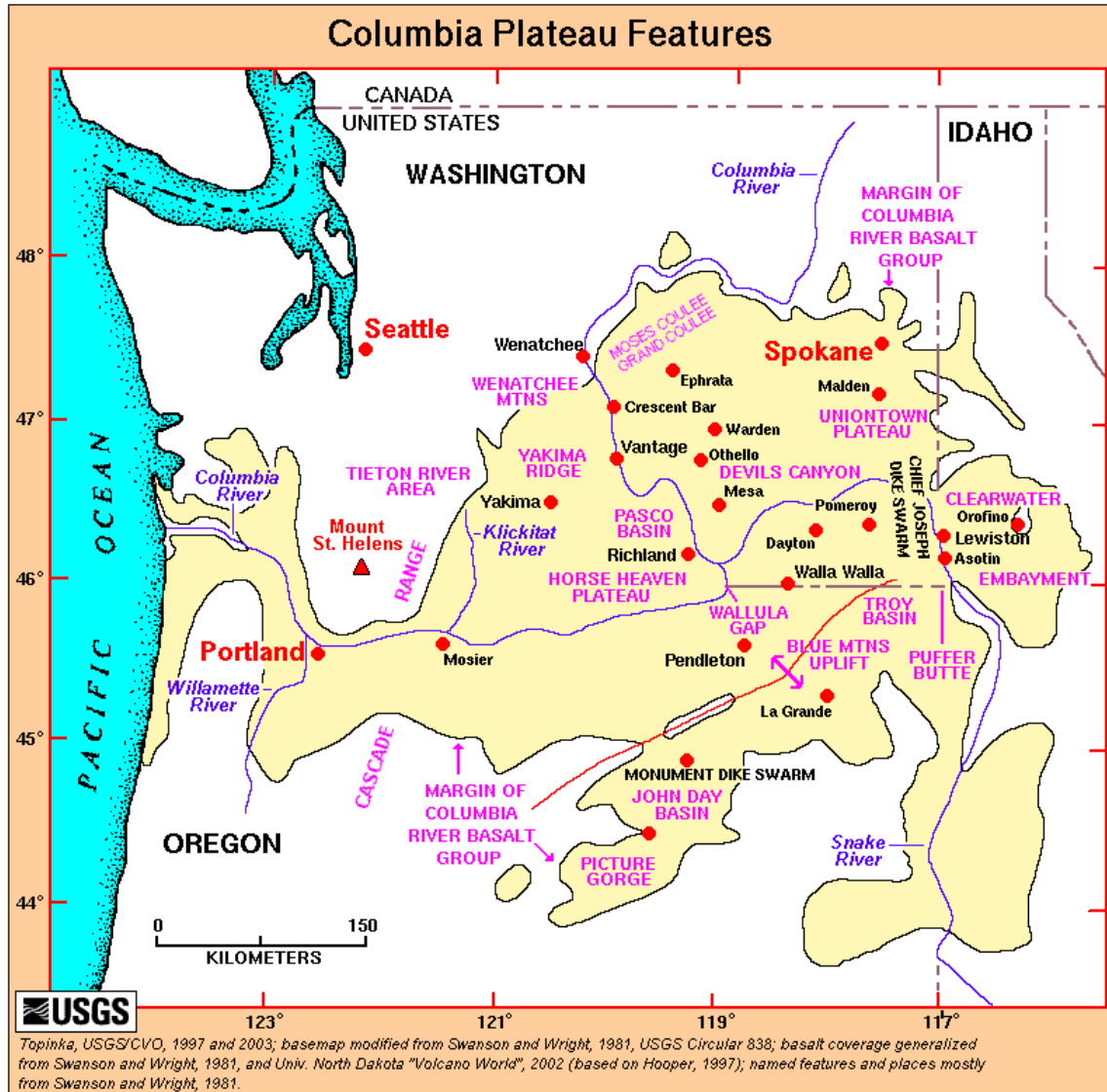
Lesson II.5 - Fissures

1. **Fissures or Rifts** - these are not true volcanoes in the sense of those that form cones or craters. A Fissure is an opening or crack in the earth out of which flows lava.



Hawaii Volcano - fissure eruption on the big island of Hawaii

One of the largest fissure volcanoes to have ever erupted is found in the state of Washington. It is called, The Columbia Plateau or The Columbia Flood Basalts. The size of this huge lava formation has been measured to be over 63,000 square miles of lava flows and some of it is over 2 miles thick. No one knows exactly when it was formed or how it was formed. One thing is certain - nothing like this is being formed today. It must have been related to a unique geological event in the past, most likely the *Genesis Flood*! Below you can see just how much of the western United States that these basalt lava flows covered.



Basalt is a dark colored rock filled with iron. After exposure to water and air, the rock begins to rust. It therefore turns to brownish orange.

Activity: P,K,1,2,3

Supplies:

United States map

Map study: Find the Columbia Plateau on a map of the United States. Just how big is the Columbia Plateau? Well, let's do some figuring. Do you have a friend or relative that lives an hour away

from you? It would take about 8-10 hours, or driving to your friend's house 8-10 times before you would drive from one end of the Plateau to the other!

Activity 2,3

Supplies:

United States map

Map study: Find your home city on a map. How far away from the Columbia Plateau do you live? You can figure this in miles, or hours, or days, if you live really far away!

Activity: P.K,1,2,3

Examine the basalt lava in your kit. Record or draw your observations.



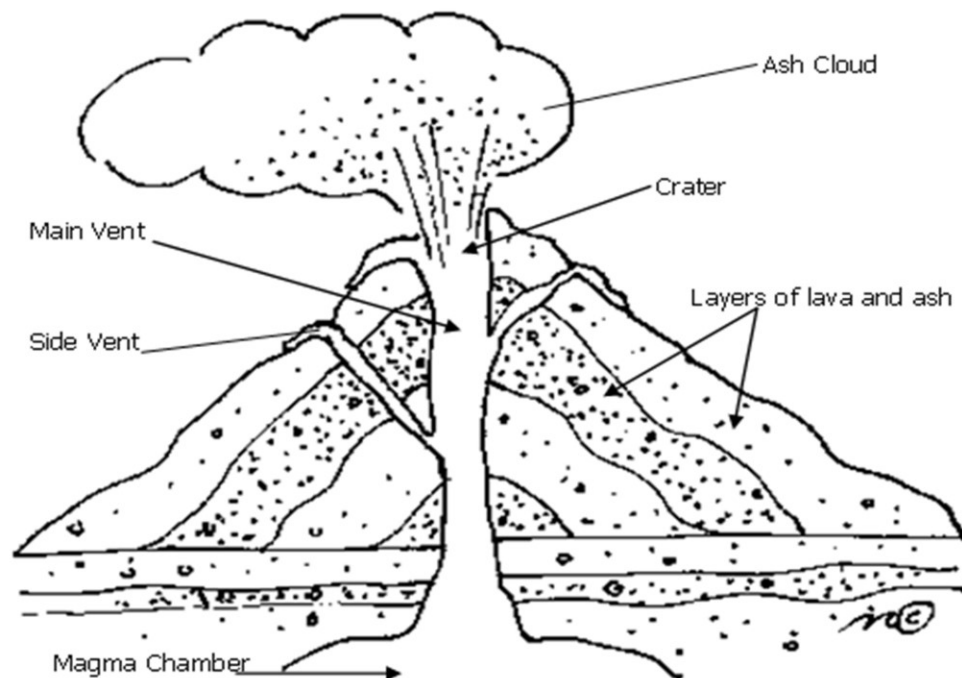
Activity: P,K,1,2,3

Find four different types of volcanoes, either on the internet, in magazines or in books. Draw their pictures in your lab book.

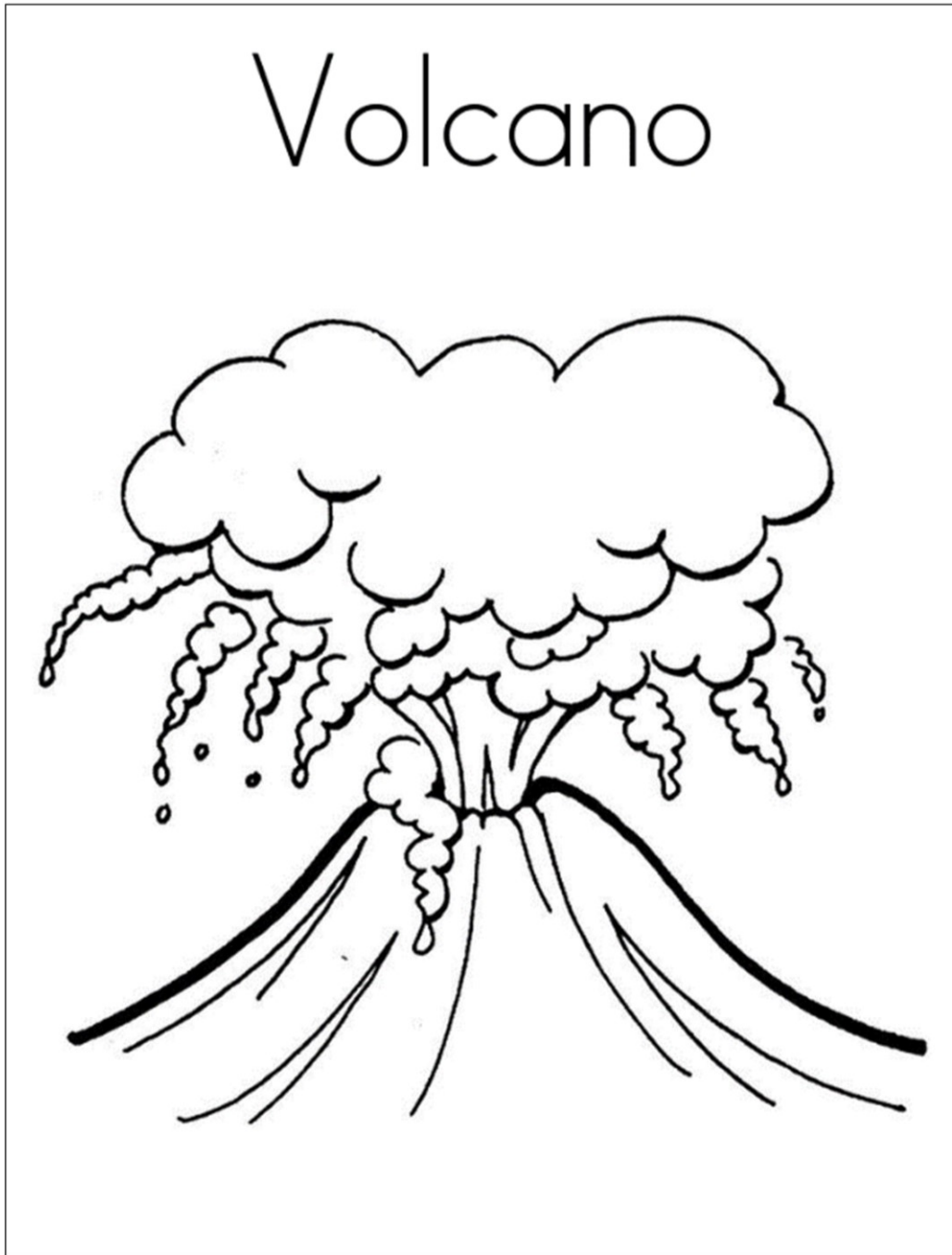
Activity 2,3

Include in your drawing the types of volcanic material that comes with each type of volcano.

Although there are many types of volcanoes, most have these similar features as shown in the picture below.



Using the following picture, can you draw, name and color these parts of a volcano? You may copy the picture if you like, or draw your own.



Double take:

1. What mineral causes basalt lava to appear brownish-orange?
2. A fissure is an _____ or a _____ in the earth out of which _____ flows.