

Ch 18 Volcanoes

Section 1 Guided Reading

Scan Section 1 of your text. Write two questions that come to mind from reading the headings and figure captions.

1. _____

2. _____

Use your text to define the following terms

3. volcanism _____

4. hot spot _____

5. flood basalt _____

6. fissure _____

7. conduit _____

8. vent _____

9. crater _____

10. caldera _____

11. shield volcano _____

12. cinder cone _____

13. composite volcano _____

Complete the following sentences to better understand hot spots. _____ are unusually hot regions of Earth's mantle. In these places, high-temperature plumes of mantle material _____ toward the surface.

The heat of the plumes _____ rock into _____. This _____ melts through the _____ and forms _____.

Create a cross section of a volcano. Show the interior of the volcano. Label the following: I am NOT grading on artistic ability! Just be sure to show these 3 things.

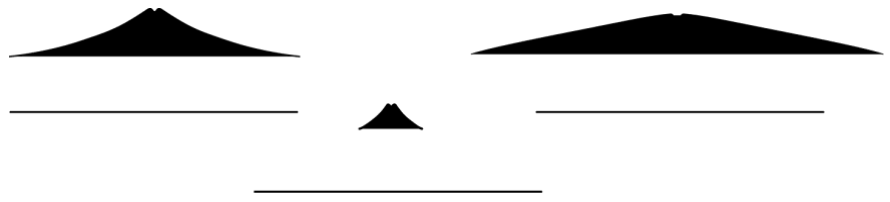
- crater
- magma chamber.
- vent

Sequence the steps in the formation of a lake in a caldera. Refer to Figure 8 for help.

- _____ An expansive, circular depression is left.
- _____ A volcano erupts many times.
- _____ The caldera that is formed, may fill with water to form a lake.
- _____ The top of the partially empty magma chamber collapses.

Write each of the following terms on the line below its corresponding image.

- Cinder-cone volcano
- Composite volcano
- Shield volcano



Compare and contrast the three types of volcanoes by completing the table below.

Type of volcano	Description	How does it form?	How explosive is its eruption?
Cinder-cone	steep sides, generally small		more explosive than a shield
Shield			
Composite	larger, with steep slopes that are concave		

Using knowledge from the chapter titled Plate Tectonics, where would you predict each of the three types of volcanoes would form?

Go to a map and name three shield **OR** composite volcanoes. Refer to the previous question to explain why these volcanoes formed in their present location.

1. _____

2. _____

3. _____

Contrast (what is different) *convergent and divergent volcanism.*

Yellowstone National Park *sits atop a caldera formed 650,000 years ago. Describe evidence showing that this area is still a geologic hot spot.*
