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.*

_____

_____

_____

_____

_____