

Chapter 10

Use with Section 2

ENRICHMENT

• Types of Volcanoes

Kinds of Volcanic Eruptions

Just as there are different forms of volcanoes, there are different kinds of volcanic eruptions. Even the same volcano may not always have the same kind of eruption each time. Scientists who study volcanoes classify eruptions according to how violent they are. They use as many as ten different classifications, but four main categories.

- **Hawaiian eruptions** are the quietest. Like the volcanoes they are named after, Hawaiian eruptions are characterized by very fluid lava and very little explosive activity.
- **Strombolian eruptions** are a little more violent. Named after the Stromboli volcano in Italy, they have thicker lava flows and some small explosions.

- **Vulcanian eruptions** are named after the Vulcano volcano in northern Sicily. The word *volcano* comes from the name of the Roman god of fire, Vulcan. He was believed to live beneath this volcano. Vulcanian eruptions are not often characterized by lava flows. They have larger explosions of ash and rock, which rise in dark clouds.
- **Pelçean eruptions** are named after Mount Pelç. In them, magma blocks the volcano's vent, building up tremendous pressure. The magma is removed by a violent gas explosion that can send glowing clouds, or clouds of hot ash and gas, hurtling down the sides of the volcano. Often parts of the volcano are blown away.

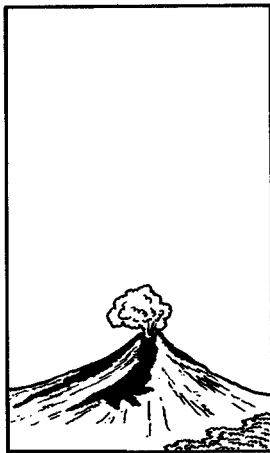


FIGURE 1

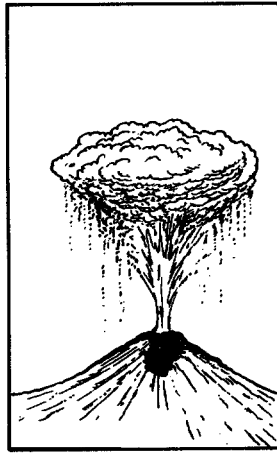


FIGURE 2

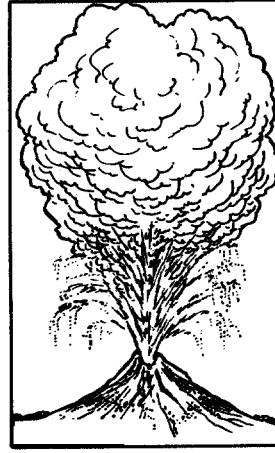


FIGURE 3

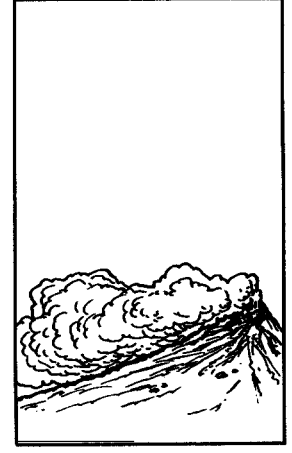


FIGURE 4

Compare the pictures showing four different kinds of volcanic eruptions. Identify each as Hawaiian, Strombolian, Vulcanian, or Pelçean. Give reasons for your choices.

Figure 1. _____

Figure 2. _____

Figure 3. _____

Figure 4. _____
