“What Is a Volcano?”

From Violent Volcanoes

by Louise and Richard Spilsbury

A volcano is a hole in the Earth’s surface. The hole reaches down into a pool of hot, liquid rock below. Most of the time, a volcano is silent and still. However, it can also suddenly erupt. When it erupts, boiling rock from inside the Earth spurts out of the opening. This lava may spill out like bubbling molasses, or it may shoot into the air at high speed. Some volcanoes give off clouds of ash and gas as well.

Incredible Power

Most of the volcanic eruptions that happen are small, but some can cause terrible destruction. They can damage buildings, injure, and kill people. A large, violent, volcanic eruption can destroy all life for kilometers around. Volcanoes can completely change the way the land around them looks. They can blast away patches of ground and create new areas, such as hills or slopes. Some volcanoes shoot so much ash into the sky that they change the weather in an area for months on end.
Volcanoes
by Seymour Simon

In early times, no one knew how volcanoes formed or why they spouted red-hot molten rock. In modern times, scientists began to study volcanoes. They still don’t know all the answers, but they know much about how a volcano works.

Our planet is made up of many layers of rock. The top layers of solid rock are called the crust. Deep beneath the crust is the mantle, where it is so hot that some rock melts. The melted, or molten, rock is called magma.

Volcanoes are formed when magma pushes its way up through the cracks in Earth’s crust. This is called a volcanic eruption. When magma pours forth on the surface, it is called lava. As lava cools, it hardens to form rock that is also called lava.

What do you think the text structure is? ____________________________

Why? _________________________________________________________

Read the last excerpt. Read through once and think about the text structure. Read a second time and highlight words and phrases that provide clues to text structure. Annotate your thinking. How does this excerpt differ from the first two?

“The Volcano Wakes”

From Volcano: The Eruption and Healing of Mount St. Helens
by Patricia Lauber

For many years the volcano slept. It was silent and still, big and beautiful. Then the volcano, which was named Mount St. Helens, began to stir. On March 20, 1980, it was shaken by a strong earthquake. The quake was a sign of movement inside St. Helens. It was a sign of a waking volcano that might soon erupt again. . . .

In the middle 1800s a number of small eruptions took place. Between 1832 and 1857 St. Helens puffed out clouds of steam and ash from time to time. It also gave off small flows of lava. Then the mountain fell still.

(Continued)
For well over a hundred years the volcano slept. Each spring, as winter snows melted, its slopes seemed to come alive. Wildflowers bloomed in meadows. Bees gathered pollen and nectar. Birds fed, found mates, and built nests. Bears lumbered out of their dens. Herds of elk and deer feasted on fresh green shoots. Thousands of people came to hike, picnic, camp, fish, paint, bird-watch, or just enjoy the scenery. Logging crews felled tall trees and planted seedlings.

These people knew that Mount St. Helens was a volcano, but they did not fear it. To them it was simply a green and pleasant mountain, where forests of firs stretched up the slopes and streams ran clear and cold.

The mountain did not seem so trustworthy to geologists, scientists who study the earth. They knew that Mount St. Helens was dangerous. It was a young volcano and one of the most active in the Cascade Range. In 1975 two geologists finished a study of the volcano’s past eruptions. They predicted that Mount St. Helens would erupt again within 100 years, perhaps before the year 2000.

The geologists were right. With the earthquake of March 20, 1980, Mount St. Helens woke from a sleep of 123 years.

What do you think the text structure is? ________________________________

Why? ________________________________

Note: Notice in the first paragraph the way in which Patricia Lauber personifies the volcano, by saying it “slept” for many years, and that in 1980, it showed signs of “waking.” In addition, even though assigning it the adjectives of silent, still, big, and beautiful isn’t full-tilt personification, the author is purposefully enhancing our sense of Mount St. Helens as a being. In the second paragraph, Lauber continues to give us this sense of the volcano as a willful, puffing dragon. In the third paragraph, we are treated to idyllic, almost Disneyesque images of people and nature living in harmony. Notice the way Lauber deftly continues this conceit of the seemingly “pleasant” mountain, but roiling beneath, “untrustworthy” qualities, according to the geologists. The effect? We are enticed into this narrative, curious to know more about when Mount St. Helens erupted, and how severe was its effect. Effective nonfiction writers such as Lauber use many literary devices to make facts “fully rounded” with human emotion and consequence.