

K-PREP
Sample Items
2012

Reading Grade 7

Read the following factual article and personal account of the historic Mount St. Helens eruption. Then answer the questions that follow.

Jamie's Journal

September 10, 1979

- 1 We had an awesome time last weekend! We packed up our tents and camping gear and headed to Mount St. Helens for some rest and relaxation. We certainly weren't up to hiking the mountain, which is taller than any skyscraper I've ever seen in the city! Actually, that's an understatement. This mountain is over 9,000 feet high! That's ten times the height of Seattle's tallest building!
- 2 We hauled our gear along a trail leading to the shores of Spirit Lake, a place where I've camped with my family since I was a kid. The bright blue water was flawless, like an azure mirror that generated a replica of the equally flawless sky. The surrounding meadows were covered with millions of lupines, purple flowers that cling like clamshells to dozens of tiny stems. As we rounded the final bend toward our campsite, we surprised three large elk! (Truthfully, *they* surprised *us*!) I suppose this lake is enticing enough to attract creatures from every species!
- 3 We felt like kids, telling stories around a campfire, roasting marshmallows, and competing to make the most elaborate finger puppet shadows on the walls of our tent. When our eyes began to dim by the light of the fire, we called it a day. Mount St. Helens kept silent watch all night long as we slept a peaceful slumber in our sleeping bags.

May 18, 1980

- 4 I have been glued to the television all day. It seems so impossible. I can scarcely believe my eyes! Mount St. Helens has erupted, and from what reporters are saying on the news, this once stunning mountain has been ravaged by landslides and ash. I can even see the plume of ash from here in Seattle, and it looks like something from a science fiction movie. Surely this all can't be real!
- 5 We've been advised to stay indoors because the ash cloud is so large that it will make the air difficult to breathe, even up here in the city. We've already seen little specks, sinister little snowflakes, falling from the sky. I keep thinking about all that ash covering every single thing around that beautiful place I have loved my whole life.

August 25, 1980

- 6 Now that the ash has cleared, we've all seen the first pictures from the ground near Mount St. Helens. On one side of the mountain, everything's green and robust, but just on the other side, the ghostly remnants of trees are all that remain. They look like gigantic toothpicks standing guard over a desolate planet. How odd that the blast spared one side of the mountain but showed no pity toward the other!
- 7 The first pictures of Spirit Lake reveal something much different from what I remember. The surface of the water is largely concealed by a patchwork quilt of toothpicks—the trees that were carried into the lake by the landslide. Where there is water, it appears murky and lifeless, far removed from the marble blue of a year ago. The landscape is so distorted that I can't even pinpoint where my friends and I camped last year. I can't even recognize it as Spirit Lake, even though I've been camping there since I was a kid.
- 8 The whole blast zone is bleak and beaten and so very, very sad.

June 1, 1981

- 9 I heard some great news today! Researchers at Mount St. Helens discovered a lupine, of all things, growing on the blighted slope of the mountain! Maybe there is hope after all! Maybe this once scenic place can live to tell its stories to my children and grandchildren someday. Maybe it can again be a jewel on the golden crown of the Cascades. I am ever hopeful and will be watching for more news of life's return to Mount St. Helens! If a lonely lupine can survive such a catastrophe, surely other species can make their return as well!

Mount St. Helens

Background

- 1 Mount St. Helens is located in southern Washington State, along the Cascade Mountain Range. Although the mountain was named after a British ambassador in 1792, native peoples long ago referred to it in their own tongues as "smoking mountain." The youngest mountain of all those in the Cascades, Mount St. Helens is more than a rocky peak. A rich history of eruptions makes Mount St. Helens the most active volcano in the country.

Eruption History Before May 1980

- 2 Prior to 1980, Mount St. Helens had erupted multiple times over a period of four thousand years. Geologists noticed that these eruptions occurred about every 150 years,

and they had warned the public that there would likely be another eruption before the end of the twentieth century. On a cold March morning in 1980 that is exactly what happened; Mount St. Helens erupted, setting off a chain of dozens of eruptions that continued for about twenty-five years. The tiny eruption of March 27, 1980, released only a small amount of steam and ash from the summit of the mountain. Although a surprise to residents of the Pacific Northwest, most Americans paid no heed to this turn of events. Geologists, however, saw this as their own warnings coming true.

Eruption of May 1980

- 3 Nearly two months later, on May 18, 1980, Mount St. Helens erupted on an unbelievably destructive scale. Pressure from magma (molten rock deep within Earth) finally built to a point of violent release. The pressurized mountain blew its top, shooting ash twelve miles into the sky within minutes of the eruption. The effects of the ash were mind-boggling, as a blanket of ash settled like snow over an area of 22,000 square miles, which is nearly half the size of Kentucky. The ash was so thick that it obscured the sun to make it appear that it was nighttime, even though it was only just after 8:30 in the morning. The heat and heaviness of the ash suffocated all plant and animal life in the blast zone, including large species like elk and mountain goats. Some ash traveled on the wind to the East Coast in three days and even circled Earth within two weeks.
- 4 As the ash wreaked chaos on the atmosphere and land surrounding Mount St. Helens, the north side of the mountain crumbled to create the largest landslide in history. Spirit Lake, located in the path of the landslide, received the brunt of the blast, which dumped so much debris into the lake that its water level was raised by nearly two hundred feet. When the landslide reached the Toutle River, it was transformed into a lahar, a thick muddy mixture of water and debris that carried with it everything in its path. The result was huge deposits of trees, vegetation, and mud, measuring up to five hundred feet tall in some places at the foot of Mount St. Helens.
- 5 As the top of the mountain crumbled, the eruption delivered its last surprise in the form of a lateral (sideways) blast that traveled more than three hundred miles per hour. The blast was a heated wind fueled by the gases within the volcano, and it burned everything in its path, including about 230 square miles of forest. That's over three times the size of Washington, D.C.
- 6 The eruption changed the appearance of Mount St. Helens significantly. Once standing 9,677 feet at the summit, the blast removed 1,300 feet from the top and carved a huge hole in the north face. The once perfectly formed mountain now gaped open on the north side, looking more like a horseshoe than a volcano.

1

While the eruption of Mount St. Helens was a shock to Jamie, it did not shock scientists because _____.

Explain what background information led to the scientists' conclusions.

2

Using "Jamie's Journal" and "Mount St. Helens," compare and contrast Mount St. Helens and Spirit Lake both before and after the eruption on May 18, 1980.

Reading

A large rectangular box with a thick black border, containing 25 horizontal lines for writing. The lines are evenly spaced and extend across the width of the box. The first line is slightly shorter than the others, starting from the left margin. The rest of the lines are full-width.