

tudent Grade Level 4

Volcano Erupts and Extremes in Nature for Kids

Unit 17 Selection

Read the article and the blog and then answer the questions that follow.

Vol. 8 / Issue 122

Monday, May 18, 1990

Local news you can count on

Washington Express News

Volcano Erupts

By Lisa Collins Staff Writer

Clouds of dark volcanic ash covered the sky in eastern Washington on May 18, 1980, following the eruption of Mount St. Helens. Mount St. Helens had been an inactive volcano for 123 years. The eruption brought many changes to the land around the volcano.

Before the eruption, the mountain area was full of life. Visitors from around the world came to camp, hike, and admire the natural beauty of the mountain. Flying squirrels, spotted owls, deer, and bears made their homes in the forests surrounding the mountain. Mountain goats were





Mount St. Helens before the eruption

By April, there was a large bulge in the side of Mount St. Helens. Gases were building inside the volcano causing it to swell. Scientists were concerned that something catastrophic might occur.

The event scientists feared happened when an earthquake shook Mount St. Helens. The earthquake measured 5.1 on the Richter scale. The Richter scale is the tool scientists use to measure the strength of an earthquake. This earthquake was very strong, and the bulge in the side of the volcano could no longer hold the rising gases. The north side of the mountain exploded.

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Volcano Erupts and Extremes in Nature for Kids

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A massive avalanche of rock, ice, snow, and soil slid from the volcano toward Spirit Lake and the valley below. The blast was so powerful that some trees were blown as far as six miles. Other trees were snapped in half or uprooted.

Mud and logs from broken trees filled the lakes and rivers. The water became warmer when the avalanche occurred due to the hot temperature of the volcano.

A mushroom-shaped cloud of ash rose thousands of feet into the sky. It drifted over the eastern part of Washington. Mount St. Helens continued to spew ash for close to nine hours.

The ash, mixed with the snow and ice from the mountain, began to move downward. As the snow and ice melted, a mudflow formed and slid down the mountain at speeds up to 30 miles per hour. The mudflow destroyed bridges and carried away houses. More than 200 homes were buried in the mud.

Mount St. Helens was usually crowded with tourists. Most campers and visitors were not present when the mountain erupted because it happened on a Sunday morning. Unfortunately, some people still lost their lives in the explosion.

Many animals died in the avalanche and mudflow, but some small animals survived. Rodents, frogs, and crawfish remained alive because they were underground or below the surface of the water.



Mount St. Helens during the eruption

On that day, the sky was dark in eastern Washington. Schools were closed. In some areas, the streets were so thickly layered with volcanic ash that you could not drive your car. Rooftops were covered with ash, resembling gray and black snow.

Ten years later, Mount St. Helens continues to recover. While the landscape will never be the same.

visitors l beauty o

The high-interest reading selections in Total Motivation ELA reflect a variety of literature and informational texts.

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Name	0_		
Volcano Erupts and Extremes in Nature for Kids	Unit 17 Selection		
While the title and the names of the following blog posts and commare based on facts.	ents are fictional, the accounts		
Extremes in Nature for	r Kids		
Posted by Nature Kids			
At 8:32 a.m. on May 18, 1980, a 5.1 <u>magnitude</u> earthquake structure the energy released from inside the earth resulted in a nine-hout blew off the top of the mountain and destroyed miles of forests. It citizens who witnessed the effects of Washington State's live volcing the state of the s	r eruption. This eruption The following posts are from	Total Motivation ELA support students as they receive	
What do you remember about the eruption of Mount St. Helens?	Sandra L., May 18, 2010	instruction with complex text	
8 Comments		that require deeper levels of	
natKu May 18, 2010		comprehension and analysis.	
I was eleven years old, and we were visiting my grandmother in we heard of the eruption, we evacuated. I was so scared when th the sky. It was very dark, and the sun looked red.	e ash started pouring from		
 Lkk12 May 19, 2010			
I was living in Everett, Washington, at the time of the eruptio thought a car had backfired until I heard the news. I could see near the mountain.	Unit 17 Selection	NameVolcano Erupts and Extremes in Nature for Kids	
JanDHow May 19, 2010	Moore4CP May 20, 2010		
I was a young girl living in Kelso, Washington, when all of a s shaking and rattling. I looked outside, saw black smoke, and l family drove across the river that connected Kelso to Lewisto jammed with mud and trees. Later that week, snow fell. It wa	•	I in ash following the eruption of Mount St. Helens. Several Portland. I saw ash in the gutters and on the plants.	
	BevRlee May 20, 2010		
Sum10D May 20, 2010 I was in my hometown of White Salmon, Washington, the day	I have a photograph of a rocky ledge near Mount St. Helens. Because the volcano erupted only five miles away, the ledge is no longer visible. $ \\$		
grew very hot and still. The birds stopped singing.	joyFul2u May 21, 2010		
mentoring minds.com motivationela "LEVEL 4	I lived about 150 miles from Movolcano. It was exciting but scar	unt St. Helens. I was sleeping when I heard the boom of the y.	
	JudePR May 21, 2010		
	I was a student at Portland State eruption. The effects of the volca downtown, I wore a mask to pre	te, about 50 miles away, at the time of the Mount St. Helens uno became part of my everyday life. When I rode the bus vent a sore throat. A mask was placed over the bus radiator ne, we had to shovel ash and rock out of our gutters, so the fall.	

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- Volcano Erupts and Extremes in Nature for Kids
- Lisa Collins organized information in this article using
 - a chronology of the events of the eruption.
 - an explanation of the steps of a volcanic eruption.
 - the causes and effects of the eruption of Mount St. Helens.
 - a description of the mountain before, during, and after the eruption.
- Select three details from the passage that are signs of a possible eruption.
 - A rising gases
 - earthquakes
 - visible smoke
 - D bulge in mountain
 - © nervous and restless animals

erupted before?

Unit 17 Assessment

Use "Volcano Erupts" to answer questions 1-7.

1. This question has two parts. First, answer part A. Then, answer part B.

Volcano Erupts and Extremes in Nature for Kids

Part A

Name

Which sentence best states the main idea of "Volcano Erupts"?

- Mount St. Helens was full of life before its eruption.
- An earthquake caused the eruption of Mount St. Helens.
- Many events surrounded the eruption of Mount St. Helens.
- People were affected by the eruption of Mount St. Helens.

Choose three details from the article that best support your answer in part A.

- (A) "Mount St. Helens had been an inactive volcano for 123 years.
- "Mud and logs from broken trees filled the lakes and rivers."
- "A mushroom-shaped cloud of ash rose thousands of feet into the sky."
- "More than 200 homes were buried in the mud."
- "Mount St. Helens was usually crowded with tourists.'

Read the sentence from the article.

By April, there was a large bulge in the side of Mount St. Helens.

Which words from the article support the reader's understanding of the word

- "causing it to swell"
- "the rising gases"
- "blown as far as six miles"
- "mushroom-shaped cloud of ash"
- Read the sentence from the article.

Scientists were concerned that something catastrophic might occur.

What can the reader infer from the author's use of the word catastrophic in this sentence?

- The scientists expected small earthquakes.
- The scientists planned the eruption of the volcano.
- The scientists believed something tragic could happen.
- The scientists feared the Richter scale would not work.

- 7. Which sentence from the article provides evidence that Mount St. Helens had
 - "Mount St. Helens had been an inactive volcano for 123 years."
 - "By April, there was a large $\underline{\text{bulge}}$ in the side of Mount St. Helens."
 - "Mount St. Helens continued to spew ash for close to nine hours.'
 - "Ten years later, Mount St. Helens continues to recover."

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Unit 17 Assessment Volcano Erupts and Extremes in Nature for Kids Use "Extremes in Nature for Kids" to answer questions 8-14. 10. How do some blog comments demonstrate What is the significance of the date the question was posted? the far-reaching impact of the eruption? A It was the date of the eruption. A They discuss specific events during the eruption. ® It was the thirtieth anniversary of the eruption. They identify locations and the effects over time. It was the beginning of the Mount St. Helens' network They describe ongoing fears as a result of the eruption. It was intended to record the history of Mount St. Helens. They share emotions and feelings experienced at the time of the eruption. What is a similarity found among the blog comments? Name _ All comments reveal the ages of the 11. What topic bloggers at the time of the eruption. Unit 17 Assessment this blog s Volcano Erupts and Extremes in Nature for Kids All comments identify bloggers' A torna What blog comment demonstrates that 14. How did the bloggers determine the locations at the time of the eruption. tsunar the eruption was hazardous to the topic of their comments? All comments describe the effects of health of people? A the title the ash on the bloggers. endan A Lkk12 B the dates All comments include sensory devas ® Sum10D experiences of the bloggers. © the question © Moore4CP the introduction JudePR motivationela"LEVEL 4 mentoring**minds**.com 13. Read the sentence from the blog. At 8:32 a.m. on May 18, 1980, a $5.1 \, \underline{\text{magnitude}}$ earthquake struck under Mount St. Helens. What is the ${f best}$ definition of the word Washington Express News magnitude as used in this sentence? a measure of the energy released from an earthquake a measure of the damage caused by an earthquake a measure of the length of the eruption time a measure of the size of the volcanic mountain 184 motivationela™LEVEL 4 mentoring**minds**.com



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Volcano Erupts and Extremes in Nature for Kids

- 18. Why might the author have chosen to pair "Volcano Erupts" with "Extremes in Nature for Kids"?
 - to allow the reader to describe the facts in their own words
 - B to allow the reader to compare the effects of the event over time
 - © to allow the reader to make a personal connection to a historical event
 - © to allow the reader to understand the feelings and emotions of witnesses

19. Read the sentence from the article.

Mud and logs from broken trees filled the lakes and rivers.

Which blogger's firsthand account supports the information found in this sentence from the newspaper article?

- A natKu
- ® JanDHow
- © joyFul2u
- JudePR

Name _______
Volcano Erupts and Extremes in Nature for Kids

Unit 17 Assessment

Use "Volcano Erupts" and "Extremes in Nature for Kids" to answer questions 15-19.

- **15.** How do the blog comments support Lisa Collins' article?
 - The comments refer to personal observations of some of the events described by Lisa Collins.
 - ® The comments explain in greater detail the cause of the eruption of Mount St. Helens.
 - © The comments predict what the scientists had not been able to predict.
 - The comments describe Mount St. Helens before the eruption.
- $\begin{tabular}{ll} \bf 16. & The main difference between the \\ & accounts of Lisa Collins and Jude PR is \\ \end{tabular}$
 - A the opinions included in the information.
 - $\ensuremath{\mathfrak{B}}$ the ways they obtained the information.
 - © the purposes for their writing.
 - ① the topics of their writing.

- **17.** What is the difference between the information in the blog comments and the information in the news article?
 - The blog comments provide information about the events before, during, and after the eruption. The article provides information about the events during and after the eruption.
 - ® The article provides information about Mount St. Helens before, during, and after the eruption. The blog comments provide information about the events during and after the eruption.
 - © The blog comments provide specific dates and times of the events, while the article provides more general information.
 - The article is based on interviews of observers, while the blog comments are actual observations of witnesses.

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Unit 17 Revising/Editing Volcano Erupts and Extremes in Nature for Kids 20. Choose the sentence that is punctuated correctly. The eyewitness said, "Mount St. Helens spewed ash for nine straight hour's." ® The eyewitness said, "Mount St. Helens spewed ash for nine straight hours." © The eyewitness said, "Mount St. Helens' spewed ash for nine straight hours." The eyewitness said, "Mount St. Helen's spewed ash for nine straight hours." 21. Choose the sentence that contains a spelling error. Mount St. Helens errupted on a Sunday morning. ® The mudflow destroyed everything in its path. © Many animals did not survive the eruption. The blast caused trees to snap and uproot. 22. Read the following paragraph and then answer the question that follows. I heard a blast in the distance. When I peered from the window, Volcano Erupts and Extremes in Nature for Kids I saw smoke in the air. I knew that Mount St. Helens had erupted. I wondered how much damage was caused by the volcano. lcano Erupts and Tomorrow, nes in Nature for Kids Complete the paragraph by selecting the sentence with the verb phrase that is written in the correct tense. ons can you draw about the people who witnessed the my friend and I would have investigated the devastation. ® my friend and I will have investigated the devastation. © my friend and I will investigate the devastation. $\ \textcircled{\ \ }$ my friend and I investigate the devastation. mentoring**minds**.com ommend that people camp near Mount St. Helens again? Circle your response. Maybe Explain your response. Create an original idea or method to alert people in your community of a



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oo Erupts and Extremes in Nature for Kids		Unit 17 Creative Th	inking
Motivation Station	Motivation Molly says, "A firsth by a person who experienced an a		
A prepositional phrase is a g and ends with a noun or a pi			
Write five sentences that des prepositional phrase in each and each prepositional phras	sentence. Underline each pr		ıble line
Example: We ran to the store	m shelter after we heard the t	tornado sirens.	
1			
2			
3			
4			
5			
Journal			
Post a blog question about at Post a comment to the quest		r school or in your co	ommunity.
		You	get both and onli
1 Comment		print	and onli
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Unit 17 Extended Practice

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Volcano Erupts and Extremes in Nature for Kids

The ancient city of Pompeii, Italy, was a popular vacation spot for wealthy Italian citizens. Pompeii was located at the base of Mount Vesuvius, a volcano that had not erupted for hundreds of years. Nearly two thousand years ago in early August of the year 79 A.D., the citizens of Pompeii felt the <u>tremors</u> of several mild earthquakes. The people were not alarmed because they had felt these mild rumblings before. But on August 24, Mount Vesuvius erupted. Lava and mud began to flow from the volcano and down the sides of the mountain. Ash, gases, dust, and cinders shot high into the air and rained down on the city of Pompeii and other nearby towns. Over the next twenty hours, the city was completely buried by a deep blanket of ash and dust. The city was forgotten until the year 1748 when it was accidentally rediscovered. Over the last 250 years, much of the original city of Pompeii has been dug from the ruins. Today, the remains of Pompeii are a popular tourist attraction.

1. Read the sentence from the paragraph.

Nearly two thousand years ago in early August of the year 79 A.D., the citizens of Pompeii felt the <u>tremors</u> of several mild earthquakes.

What words mean about the same as the word tremors?

- A vibrating movements
- ® loud, high-pitched sounds
- © objects rough to the touch
- Storms with high winds and rain
- **2.** Mount Vesuvius is similar to Mount St. Helens because they both
 - A erupted in the year 1748.
 - B were located in Washington.
 - © erupted with little warning.
 - (D) destroyed the city of Pompeii.

- **3.** Why was the city of Pompeii forgotten for nearly 1700 years?
 - A Italian people could not afford to go there anymore.
 - B It was buried with ash and dust.
 - © The people had all moved away.
 - D It was washed away in a flood.

4.	Why might the remains of Pompeii be a
	popular tourist attraction?

Parent Activities:

- 1. Use the Internet to view images of erupting volcanoes and other natural disasters.
- **2.** With your child, build a model of a volcano. Mix vinegar and baking soda to create the eruption.



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