

Name: _____ Date: _____

1. Why did geologist Edmund Hovey travel to the Caribbean in May 1902?

- A. to investigate recent volcanic eruptions on the islands of St. Vincent and Martinique
- B. to investigate the historic volcanic eruption of Mount Vesuvius
- C. to try and predict when the next eruption of Mt. Pelée would occur
- D. to try and help any survivors of the volcanic eruptions of Mt. Pelée and Mt. Soufrière

2. Towards the end of the article, the author draws comparisons between the risks of which two volcanoes?

- A. Mount St. Helens and Mount Vesuvius
- B. Mt. Pelée and Mt. Soufrière
- C. Mt. Pelée and Mount Vesuvius
- D. Mt. Soufrière and Mount St. Helens

3. Mt. Pelee and Vesuvius both had *nuée ardente* eruptions, the most explosive and deadly type of volcanic eruption. In this type of eruption, a cloud of hot ash and gas blows out of the volcano, then rushes very quickly down the volcano's side. What conclusion can be drawn from this evidence?

- A. People living near Mt. Pelée and Vesuvius should have known that these volcanoes were active and likely to erupt.
- B. The *nuée ardente* type of volcanic eruption is less dangerous to humans than other types of volcanic eruptions.
- C. The *nuée ardente* type of volcanic eruption is incredibly dangerous to humans living near a volcano.
- D. The areas surrounding Mt. Pelée and Vesuvius are unlikely to be damaged by future *nuée ardente* eruptions.

4. Based on the text, why might predicting volcanic eruptions be an important goal of scientists studying volcanoes?

- A. because knowing when volcanoes might erupt will allow scientists to help warn people to leave the area in time to save their lives
- B. because knowing when volcanoes might erupt will allow scientists to gain more information about how volcanoes work
- C. because knowing when volcanoes might erupt will allow scientists to better understand past eruptions
- D. because knowing when volcanoes might erupt will allow scientists to collect helpful samples for museums

5. What is a main idea of this article?

- A. The eruption of Mt. Pelée in 1902 was similar to the eruption of Mount Vesuvius in AD 79, and should have been better predicted.
- B. The eruption of Mt. Pelée in 1902 caused massive destruction and death, partly because people at the time did not know much about volcanoes.
- C. It can be very exciting to live near an active volcano, which is why people currently live near volcanoes that may erupt in the near future.
- D. A geologist went to study volcanic eruptions in the Caribbean in 1902 to see how they compared to the eruption of Mount Vesuvius.

6. Read the following sentence from the text.

"With little knowledge of how volcanic eruptions occurred, the residents of Mt. Pelée woefully **underestimated** the risks of living in its vicinity and ignored signals that it was still active."

Based on this sentence, what does the word **underestimate** mean?

- A. to predict correctly
- B. to analyze completely
- C. to take something too seriously
- D. to not take something seriously enough

7. Choose the answer that best completes the sentence below.

Thousands of people lived near Mt. Pelée in 1902 _____ the volcano's signals that it was still active.

- A. in spite of
- B. because of
- C. as a result of
- D. resulting in

8. Describe three warning signs of the 1902 eruption in Saint-Pierre that people ignored at the time. Use details from the text to support your description.

9. Scientists today hope that their knowledge of volcanoes can help save human lives from future volcanic eruptions. What is one problem that might make it difficult to save lives from a future eruption?

10. Can scientists' current understanding of how volcanoes work prevent another terrible loss of human life like the ones in Pompeii and Saint-Pierre? Why or why not? Use evidence from the text to support your argument.

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8. Describe three warning signs of the 1902 eruption in Saint-Pierre that people ignored at the time. Use details from the text to support your description.

Student answers should mention three of the following signs from the text:

- Earthquakes dislodged dishes from shelves
- Fine ash fell on a town nearby
- A lightning-lit column of ash and fumes rose from the mountain
- An inch of ash covered the town
- A mudflow from the volcano killed 23 people
- A tsunami reached the harbor
- The mountain flung huge molten rocks in the air

9. Scientists today hope that their knowledge of volcanoes can help save human lives from future volcanic eruptions. What is one problem that might make it difficult to save lives from a future eruption?

Student answers may vary, but should be based in the text. Possible problems could include:

-Dense populations around the base of an active volcano could be difficult to evacuate; for example, the article says that "the prospect of evacuating a population as dense as that around Vesuvius is daunting."

-Scientists cannot predict volcanic eruptions with certainty; for example, scientists disagree on when Vesuvius might erupt again.

-Humans don't appreciate geological time scales, which makes it harder to figure out the risk of living near a volcano at any given time.

10. Can scientists' current understanding of how volcanoes work prevent another terrible loss of human life like the ones in Pompeii and Saint-Pierre? Why or why not? Use evidence from the text to support your argument.

Student answers may vary, as long as they use evidence from the text to support their argument.

Those arguing that scientists' understanding of volcanoes **CAN** help prevent the loss of human life may mention that people can recognize warning signs, take warning signs into account, and leave the vicinity of a volcano when scientists suggest that it might erupt. People could also choose to live away from active volcanoes.

Those arguing that scientists' understanding of volcanoes **CANNOT** prevent the loss of human life may mention that scientists cannot predict volcanic activity with certainty, and that it may be difficult to evacuate large populations from areas of volcanic activity. Students may cite the speed with which Mount Pelée erupted (a flow of 300 mph, which killed 27,000 people in two minutes) as evidence that evacuations would have to happen quickly before an eruption; quick evacuation, though, would be "daunting" in areas with high populations, like Naples.