

Reading: Relevant-Supporting Evidence
Volcano 2

Mrs. Warren asks her students to write an argument about the following question: What is related to the height of ash clouds that are released from volcanoes?

Ben used the data table below to write his argument:

Name of Volcano	Explosive Power of Volcano (VEI Scale: 0 to 8)	Height of Ash Cloud	Wind Speed at time of volcanic eruption
Kilauea	0	Very Low	12 mph
Galeras	2	Low	2 mph
Agung	4	Medium	18 mph
Santa Maria	6	High	5 mph
Tambora	7	Very High	7 mph

Ben's Argument:

(S1) = Sentence 1, (S2) = Sentence 2, (S3) = Sentence 3

(S1) Volcanoes that have more explosive power usually produce ash clouds that reach higher into the sky. (S2) The Tambora Volcano had an explosive power of 7, and the ash cloud was very high, and the Galeras Volcano had an explosive power of 2, and its ash cloud was low to the ground. (S3) The Tambora eruption was more powerful than the Galeras eruption, and this forced the volcanic ash from the Tambora Volcano much higher into the sky.

Q3. Ben is thinking of adding more evidence to his argument. Which piece of evidence best supports his claim?

- When the Eyja Volcano in Iceland erupted in 2010, the ash cloud was so large that it stopped planes from flying in parts of Europe for 6 days.
- The volcano called El Chichon erupted in 1982 with an explosive power of 4, and its ash cloud reached a medium height.
- The volcano called Abatar erupted in 1977 with an explosive power of 2, and its ash cloud reached very high into the sky.
- The most powerful volcanic eruption measure in the last 4,000 years was the 1815 Tambora eruption, which had an explosive power of 7.

Q2. Ben claims that volcanoes that have more explosive power usually produce ash clouds that reach higher into the sky. Ben wants to add the following piece of evidence:

The volcano called Katami erupted in 1912 with a power of 6, and its ash cloud was low to the ground.

Should Ben use this piece of evidence in his argument?

- No because it does not support Ben's claim.
- No because it supports the opposite of Ben's claim.
- Yes because it supports a different claim than Ben's.
- Yes because it supports Ben's claim.

Anna is also in Mrs. Warren's class. Mrs. Warren asked Ben and Anna to compare arguments to see who used stronger evidence.

Ben's Argument:

Volcanoes that have more explosive power usually produce ash clouds that reach higher into the sky. The Tambora Volcano had an explosive power of 7, and its ash cloud was very high, and the Galeras Volcano had an explosive power of 2, and its ash cloud was low to the ground. The Tambora eruption was more powerful than the Galeras eruption, and this forced the volcanic ash from the Tambora Volcano much higher into the sky.

Anna's Argument:

Volcanoes that have more explosive power usually produce ash clouds that reach higher into the sky. The city of Pompeii was buried under about 15 feet of ash when the Mount Vesuvius Volcano erupted 1,934 years ago. Because the ash buried the city, it also preserved everyday items like animal bones, broken pieces of pottery, plants, buildings, and even art, which scientists use to learn about the lives of the people who once lived in Pompeii.

Q3. Which student, Ben or Anna, better supports his or her argument? Why?
Please write your answer in the box below.
