

Reading: Relevant-Supporting Evidence
Earthquake 1

Mrs. Johnson asks her students to write an argument about the following question: **What is related to how much energy an earthquake releases?**

Terrance used the data table below to write his argument:

Number of Hurricanes per year	Number of Earthquakes per year	Energy Released from Earthquake
10	1	Very Large
7	15	Large
12	134	Medium
15	1,319	Small
4	13,000	Very Small

Terrance's Argument:

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

There tend to be fewer earthquakes that release lots of energy. (S2) Each year there are about 13,000 earthquakes that release a very small amount of energy, but only one earthquake that releases a very large amount of energy. (S3) This means that fewer earthquakes are likely to occur when lots of energy is released.

Q1. Terrance is thinking of adding more evidence to his argument. Which piece of evidence best supports his claim?

- The 1920 Haiyuan Earthquake released a very large amount of energy and was the largest earthquake this century.
- There are about 130,000 earthquakes that release an extremely small amount of energy every year.
- There are about 130,000 earthquakes that release a very large amount of energy every year.
- While there are about 500,000 earthquakes measured each year, only about 100,000 of them are in the United States.

Q2. Terrance claims that there tend to be fewer earthquakes that release lots of energy. He wants to add the following piece of evidence:

The NEIC now locates about 50 earthquakes each day, or about 20,000 a year.

Should Terrance use this piece of evidence in his argument?

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

Dina is also in Mrs. Johnson's class. Mrs. Johnson asked Terrance and Dina to compare arguments to see who used stronger evidence.

Terrance's Argument:

There tend to be fewer earthquakes that release lots of energy. Each year there are about 13,000 earthquakes that release a very small amount of energy, but only one earthquake that releases a very large amount of energy. This means that fewer earthquakes are likely to occur when lots of energy is released.

Dina's Argument:

There tend to be fewer earthquakes that release lots of energy. In 2011 there were 2,276 earthquakes that released a small amount of energy, but there are usually about 1,319 earthquakes that release this amount of energy. Therefore, more earthquakes will probably happen when less energy is released.

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