

Assessing with Primary Sources

Grade Level: Middle School (Grades 6-8)

Standards or Objectives: CCSS.ELA-Literacy.RI.8.1

Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-Literacy.RI.8.6

Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Library of Congress Resources:



“It’s a Dark Day in Africa and Australia Today; Eclipse of Sun to Touch U.S. in 1923”

East Oregonian : September 22, 1922, ROUND-UP SOUVENIR EDITION (page 20)

<http://chroniclingamerica.loc.gov/lccn/sn88086023/1922-09-22/ed-2/seq-20/>

Topic Background:

Because of the rarity of a total solar eclipse, and because of the lack of today’s widespread availability of images and videos showing an eclipse, there was much uncertainty in regards to exactly what would happen during such an uncommon occurrence. On September 10, 1923, a total solar eclipse was observable from the far western coast of the United States. The next total solar eclipse that will be observable in the United States will not occur for almost 93 more years, which happens to be this upcoming August 21, 2017. Although total solar eclipses happen approximately every 1 ½ years, most are not observable due to remote locations in the path of the shadow, or due to the location being over the ocean, which is not only inaccessible to most, but also is usually accompanied by cloudy or stormy weather conditions which obscures the view of the sun.

Source(s) Used:

The source used for this assessment is a newspaper article written in Chicago but appearing in the East Oregonian newspaper in Oregon on September 22, 1922. The author discusses the total solar eclipse that will occur in a few days over Western Africa, Australia, and the Pacific Islands. There is mention of the total solar eclipse of the following year that will be observable in California, as well as mention of the fact that the next total solar eclipse that will be observable under favorable conditions in the United States will not occur until August 21, 2017.

(Note: A discussion following the reading of this article of how the date of the next total solar eclipse is determined with such accuracy can lead into an activity that is in line with NGSS-MS-ESS1-1 of the Next Generation Science Standards, which consists of developing and using a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.)

Answer Key:

Question 1 – B

Question 2 – B

East Oregonian: Round-Up Souvenir Edition
September 22, 1922

IT'S A DARK DAY IN AFRICA AND AUSTRALIA TODAY; ECLIPSE OF SUN TO TOUCH U. S. IN 1923

CHICAGO, Ill., Sept. 21.—(A. P.)—The fact that you do not live on the east coast of Africa, Australia or on islands in the Southern Pacific ocean relieves you of the unpleasantness of a dark day today.

Friday, according to Prof. Edwin B. Frost of the University of Chicago and director of the Yerkes Observatory, a total solar eclipse will occur over that region.

The moon, coming between the earth and the sun, will cast a shadow which will sweep over the southern sea from a point off the eastern coast of Africa near the Equator, cross a few scattered islands and the continent of Australia and then out to the Southern Pacific ocean, he said.

This trail of the shadow will be about 115 miles wide. The duration of totality at different points will vary from three to six minutes and Professor Frost declared this to be an unusually large eclipse.

Expeditions from various astronomical institutions will be established at favorable points to study the eclipse. John Evershed, director of the observations from the Maldivé islands. Astronomers from the Royal Observatory at Greenwich, England, have established a station on Christmas island. A party from Batavia, Dutch

Indies, also will be located at Christmas island and will be joined by Dr. Freundlich from the Einstein laboratory at the Potsdam Observatory. Prof. W. W. Campbell with a party from the Lick Observatory will be stationed at Wallal, Australia. Professor Chant of the University Observatory at Toronto will be with this group.

"The total eclipse of the sun always has been one of 'nature's most thrilling spectacles,'" said Professor Frost. "It gives a momentary glimpse of the mysterious veil surrounding the sun, called the corona, which is never visible at any other time. Gigantic rosy eruptions of flowing gas also may be seen along the rim of the eclipse sun."

On September 10, 1923, he said, a total solar eclipse will touch the coast of the United States at Santa Barbara and near San Diego, Calif. The islands off the Pacific coast, notably Santa Catalina, will be well situated for stations. The track of the shadow will sweep southeast across Mexico. Preparations for observing this eclipse already have been started by several American observatories.

After the one of 1923, the next total solar eclipse that can be observed under favorable conditions in United States will be on August 21, 2017.

Questions:

1. According to the author of this article, Professor Frost believes that the total solar eclipse is one of “nature’s most thrilling obstacles”. According to the article, why does Professor Frost feel this way, particularly in regards to the eclipse that is going to happen just days from the date of this article? (CCSS.ELA.RI.8.1)
 - a. The shadow trail created by the total solar eclipse is 115 miles wide.
 - b. The corona of the sun will be visible for three to six minutes.
 - c. The next total solar eclipse, seen from the U.S. will not occur for almost 100 years.
 - d. Several great scientific minds will gather together to study the corona.

2. Which of the following statements best summarizes the author’s purpose for writing this article? (CCSS.ELA.RI.8.6)
 - a. The author wants to share his enthusiasm about the magnitude of the upcoming eclipse and inform readers about where it can be observed.
 - b. The author wants to remind Americans of how fortunate they are to not have to worry about the unpleasant darkness that will accompany the upcoming eclipse.
 - c. The author wants to inform readers about exactly what happens during a total solar eclipse and why the moments of darkness occur.
 - d. The author wants to remind Americans to make their travel plans now for next year’s eclipse that will be observable here next year.