

Words Under Pressure

Analyze how precise wording shapes a scientific account.

12.L.V.3.a "This progression transitions to 9-12.L.V.3.b."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline four words or phrases that show certainty or caution. Write S for certainty or C for caution beside each one to track how the writer presents the eclipse results.

The Eclipse Claim

- ① On May 29, 1919, two British-led teams watched a total solar eclipse from Sobral, Brazil, and the island of Príncipe, off West Africa. Astronomer Arthur Eddington helped organize the work after World War I, when cooperation between British and German scientists carried special weight. During totality, the Moon hid the Sun's bright face, allowing nearby stars to appear in photographs. The teams were not chasing a spectacle alone. They sought a careful test of Albert Einstein's prediction that the Sun's gravity would bend starlight passing close to it.
- ② The measurement demanded patience rather than drama. Clouds obscured Eddington's view at Príncipe, and rain threatened the equipment. In Sobral, heat affected one set of photographic instruments, while another produced clearer plates. Later analysis indicated that starlight had shifted by an amount close to Einstein's prediction. Newspapers announced that Newton's long-standing account of gravity had been overturned. That bold verb simplified a more cautious reality: Einstein's theory extended Newtonian physics in conditions involving immense gravity, rather than making Newton's work useless in ordinary situations on Earth, too.
- ③ The eclipse results became famous partly because the event offered a vivid image: light seeming to curve around the Sun. Yet the evidence did not arrive as a single, flawless verdict. The photographs were difficult to interpret, and later researchers examined the measurements again. Modern accounts often describe 1919 as an important early confirmation of general relativity, while noting the observations' limits. This language matters. Calling the expedition a "proof" suggests final certainty, whereas calling it evidence recognizes that scientific claims gain strength through repeated tests, improved tools, and public criticism.

2 ANSWER WITH EVIDENCE Use the passage

1 How does the contrast between "spectacle" and "careful test" clarify the teams' purpose?

2 Why does the writer describe "overturned" as a "bold verb"?

3 What does the phrase "a single, flawless verdict" suggest, and why does the writer say the evidence was not one?

4 What is the difference between calling the 1919 expedition "proof" and calling it "evidence"?

3 YOUR TURN Your own words

Write a two-sentence mini-caption about a scientific or historical finding. In the first sentence, use a word that sounds too certain; in the second, revise that claim with more precise language and explain why the revision is more accurate. Write 35 to 55 words.

PART 1 • READ AND MARK

Underline four words or phrases that show certainty or caution. Write S for certainty or C for caution beside each one to track how the writer presents the eclipse results. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How does the contrast between "spectacle" and "careful test" clarify the teams' purpose?	"Spectacle" suggests a dramatic public event, while "careful test" emphasizes that the teams were conducting scientific research.
2	Why does the writer describe "overturned" as a "bold verb"?	The word exaggerates the result by implying that Einstein made Newton's work useless, rather than extending Newtonian physics under certain conditions.
3	What does the phrase "a single, flawless verdict" suggest, and why does the writer say the evidence was not one?	It suggests a final, unquestionable conclusion. The writer emphasizes that the photographs were difficult to interpret and were later reexamined.
4	What is the difference between calling the 1919 expedition "proof" and calling it "evidence"?	"Proof" implies final certainty, while "evidence" means support for a claim that can be strengthened through further testing and criticism.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Headline: The new vaccine completely ended the outbreak. More precise caption: Early trial results showed that the vaccine lowered infections in the study group, but researchers needed larger studies and continued monitoring because one trial cannot establish that an outbreak has ended everywhere.

Accept equivalent explanations that accurately distinguish certainty from caution and connect word choice to the writer's presentation of scientific evidence. For Part 3, accept varied topics if the response has two sentences, meets the word range, and clearly revises an overconfident claim.