



Extended Reading Comprehension: Funding Space Exploration

Answer the following questions about the article.

1. Outline the author's argument from the article. Include the central claim, the supporting reasons, evidence, counterpoints, and rebuttals.

Central Claim: **The U.S. government should continue to invest in space exploration. (P1)**

Supporting Reason 1: **Space exploration inspires people. (P2)**

Evidence: **The *Apollo 11* moon landing inspired people to study science. (P2)**

Supporting Reason 2: **Technologies developed for space exploration have benefits for everyday life. (P3)**

Evidence: **Satellites (P4), artificial hearts, thermoelectric cooling systems for computers, and wireless headphones (P5) all rely on technology developed from space exploration research.**

Counterpoint 1: **Private companies, instead of the government, could fund space exploration. (P7)**

Rebuttal: **Companies won't advance scientific knowledge as much because they're less willing to take risks. (P8)**

Counterpoint 2: **The government should spend the money on more practical programs. (P6)**

Rebuttal: **Less than 1% of the government's budget goes to space exploration programs. (P9)**

- 2a. How is the first paragraph organized?

- A. a series of claims followed by evidence
B. **a series of questions followed by a claim**
C. a claim followed by several counterclaims
D. a claim followed by evidence

- 2b. Why might the author have structured the first paragraph that way? Select **two** reasons.

- A. **to draw the reader in with rhetorical questions**
B. to explain the process of how the federal budget is decided each year
C. **to acknowledge possible counterarguments that will be addressed in the text**
D. to show that space exploration is widely agreed to be a worthwhile investment

3. What is the author's purpose in comparing the motivations of private companies and governments in terms of space exploration?

The comparison supports the author's claim that the government should continue funding space exploration because private companies, which are motivated by money, wouldn't make as many discoveries or innovations as government-funded programs, which are motivated by national pride.



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Answer the following questions about the article.

4. What idea from the text is supported by the information in Image 2?
Satellite technology has many modern applications helpful to humans. Specifically, satellites can help find evidence of underground water to support people in very dry regions.
5. Cite a claim that is supported by evidence; include a brief explanation about why that evidence is reliable.
Answers will vary, but reasons why evidence is reliable should include language like "cites an expert," "gives concrete/provable examples," or "cites real studies or numbers."
6. Cite one claim the author makes that is NOT supported by evidence.
Possible answers: "It challenged them to do the extraordinary, to follow their imaginations." or "True pioneering in space is too risky to their profits."
7. What is the meaning of **allocate** as it is used as it is used in paragraph 1?
A. to set something aside for a specific purpose
B. to give without expectation of any return
C. to find the location of something hidden
8. What is a likely reason the author included the Pew Research study in the article? How does it relate to the author's point of view? Sample answer
It indicates that many people disagree with the author's point of view. It helps show which people the author might be trying to persuade.
9. Which of the following visual aids would best support the author's claim that government funding for space exploration is relatively small?
A. a line graph showing the change over time in the dollar amount spent on space exploration
B. a bar graph showing the yearly percentage of the federal budget spent on space exploration
C. a pie chart showing the percentage breakdown of the all federal budget items from 2015
D. a flowchart showing the process of how the federal government decides on its annual budget
10. What does the author hope the reader will do after reading this text?
The author hopes the reader will support U.S. funding for space exploration or realize the benefits of space science.
11. Do you agree or disagree with the author's claim? Did the author's argument persuade you to reconsider your original opinion of the topic? Explain why or why not.
Answers will vary.