

1. Which two spacecraft on the Mars Surveyor '98 were lost?

a. Polar Lander and Climate Orbiter

"The Mars Surveyor '98 was made up of two spacecraft—the Mars Climate Orbiter and the Mars Polar Lander." (3) The two lost spacecraft were valued at \$320 million. (5)

2. What was NASA's first clue that the Climate Orbiter might be in trouble?

a. It did not reestablish radio contact after passing behind Mars.

It is believed that "no radio signal was ever received" after passing Mars which suggests the Climate Orbiter was in trouble. (11)

3. Where would an article like the one you just read most likely be published?

c. in a factual report written by NASA engineers

A "report on the mission assumes that the Lander crashed into the surface of Mars." This report was written and published by NASA. (19)

4. Which of these statements from the article is NOT an opinion?

c. The two lost spacecraft were valued at \$320 million.

The Mars Surveyor '98 space program cost \$193.1 million to develop, another \$91.7 million to launch, and \$42.8 million to run. (8)

5. In the last sentence, the author writes, "We cannot continue to invest dollars in space programs and receive nothing in return." Do you agree with this statement? Explain.

It is worth investing in space programs because they help scientists "study the environment" and have a real world effect on the planet. (4)

6. How do you think a group of NASA engineers who worked on this mission might respond to this article?

I believe that NASA engineers would be disappointed. The article states that "Scientists think a mix-up of English and metric measurements caused the Orbiter to get too close to Mars and burn up in its atmosphere." (14)

**Commented [1]:** These figures total up to \$327.60. So, you would need to say: ...valued at approx. \$320 million.

**Commented [2]:** Very Good! □

**Commented [3]:** Good inference! □