

## Space Exploration - Section 4 -

Society and the environment are affected by space exploration and the development of space technologies.

Name \_\_\_\_\_

Class \_\_\_\_\_

### The Risks and Dangers of Space exploration

1. There have been three disasters, emphasizing how dangerous space travel is for astronauts. The disaster that occurred shortly after lift-off was the ...
  - A. Apollo 1
  - B. Apollo 13
  - C. Challenger
  - D. Columbia
2. There are risks to sending astronauts to the moon as well. During a routine mission to the moon, Apollo 11 had to readjust their landing site, when the original site was found to be too rocky. Their precise fuel supply restricted them to ....
  - A. try 1 more landing
  - B. try 2 additional landings
  - C. try 3 additional landings
  - D. scrub their mission and return to Earth.
3. A hazard for satellites in space is the Sun. Without adequate protection from a surge of electrically charged particles (a '**coronal mass ejection**' – also called '**solar flares**') this could occur ...
  - A. misdirection of signals
  - B. fried electrical circuits
  - C. orbital failure
  - D. system software glitches
4. A 'coronal mass ejection' can also harm astronauts by killing cells in vital organs and damaging bone marrow. They are protected when they ...
  - A. wear their space suits
  - B. wear metallic vests
  - C. use reflective vests
  - D. use polyethylene shielding
5. One hazard to us on Earth is the re-entry of a satellite. Most of the satellite will burn up, but this type of debris can cause us great harm ...
  - A. reflective
  - B. radioactive
  - C. reactive
  - D. re-entry

### Issues Related to Space Exploration

6. Do you think there is oxygen on the Moon? Scientists believe they can produce it by heating this ...
  - A. carbon
  - B. carbon dioxide
  - C. volcanic rock
  - D. cosmic dust
7. One of the benefits to spending all that money on space exploration is the potential for 'mining' natural resources. The place where these natural resources hold the greatest promise is on the ...
  - A. Moon
  - B. Mars
  - C. Jupiter
  - D. Asteroid Belt

8. Although space exploration holds great promise and potential, there are political, ethical, economic and environmental issues associated with continued exploration endeavors. ***Do we have the right to spend money on space exploration rather than fixing our problems here on Earth?*** This issue would be classified as ...
- A. ethical
  - B. political
  - C. economic
  - D. environmental
9. ***Who owns space?*** In order to establish an answer to a question such as this, it must be discussed and reflected upon. This type of question is considered to be ...
- A. a decision
  - B. an issue
  - C. rhetorical
  - D. a solution

- 
10. Identify the speaker who is expressing an **egocentric** point of view on the Issue being discussed.

- A. Susie Homemaker
- B. Frivolous Freddy
- C. Hardnosed Hank
- D. Simon Crunch

There are so many 'spin-offs' from the Space program, that the government should continue to fund the Shuttle program so that we can make a better life for people on Earth.



Susie Homemaker

To make me pay more taxes to continue the Shuttle program is going to be such a hardship on me.



Frivolous Freddy

It certainly doesn't make sense that so much of the critical funding is redirected into a program that is not making money, just spending it.



Simon Crunch

To think of all the things we could learn about living in space. It is critical that we continue this endeavor, even though it may mean more taxes for everyone.



Hardnosed Hank

# Space Exploration - 4 - ANSWER KEY

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- A. Susie Homemaker
  - B. Frivolous Freddy (His comments reflect a personal point of view only - me)
  - C. Hardnosed Hank
  - D. Simon Crunch

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