## Apply Scientific Methods

DIRECTIONS: Read the article below and respond according to THIS article. The recent discovery of Water on Mars is an incredible find. This article was written prior to that.

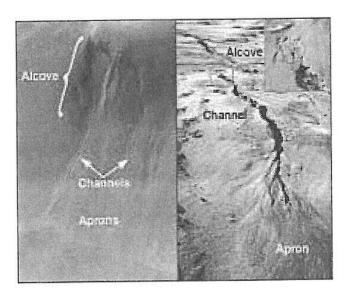
## Possible Present-Day Source of Water on Mars

In recent years, the *Mars Global Surveyor* spacecraft observed features that suggest there may be consequences of liquid water at or near the surface of Mars. These small features -- about the size of a sport utility vehicle -- have been compared to the features left by flash floods on Earth. The features look like gullies formed by flowing water and the deposits of soil and rock transported by these flows.

The gully landforms on both Mars and Earth are divided into three parts: the alcove, the

channel, and the apron. The alcove is a deep channel with a collapsed region that it's upper end. At the other end is an apron, an area of accumulated debris that appears to have been transported down the slope. The Mars gullies have been observed on cliffs and appear to be extremely young.

The presence of liquid water on Mars has implications for the questions of past and present life. If life did develop on Mars, and if it survives, these landforms are the place to look for it. If water is available, human expiration human exploration crews to Mars could access and use it. The water could be use for drinking, creating



breathable air, and extracting oxygen and hydrogen for rocket fuel.

## Questions:

- 1) Based on the information above, why do scientists believe they may have found water on Mars?
  - a. features such as polar icecaps
  - b. features such as gullies and deposits of soil and rocks
  - c. features such as erosion of soil and rock
- 2) What features on Earth do these Mars features resemble?
  - a. features left by area of accumulated debris
  - b. features left by erosion
  - c. features left by flash floods

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- 3) Compare the two images and explain how the gullies are made.
  - formed by flowing water which creates a channel while at the other end is an alcove, of accumulated debris that appears to have been transported down the slope
  - b. formed by flowing water which creates an alcove while at the other end is an apron, of accumulated debris that appears to have been transported down the slope.
  - c. formed by flowing dry ice which creates an alcove while at the other end is an apron, of accumulated debris that appears to have been transported down the slope.
- 4) Why is the presence of liquid water on Mars important?
  - a. water implications the past & present of life could have started on Mars
  - b. water implications the past & present of life could have started on Earth
  - c. water implications the past & present of life couldn't have started on Mars
- 5) How could presence of liquid water help humans?
  - a. water could be used for drinking
  - b. water could be used creating breathable air
  - c. water could be used for making rocket fuel
  - d. all the above
- 6) Why are scientists looking for life on other planets?

a.

- 7) Does it seem possible that scientists might find life on other planets?
  - a. YES
  - b. NO