## **Teacher Instructions:**



## Problem Scenario: Mission to Mars

Your students will be viewing this problem from an integrated perspective.



**The Main Problem:** Both NASA and a few private companies are hoping to launch manned-missions to Mars in the next few decades. Of course, these missions will most likely be one-way, and will require volunteers to forever leave Earth behind. How can those planning these missions recruit volunteers to go to Mars, and what are the issues involved?

## Do you want to go to Mars?

Students will review the need for volunteers to go to Mars, the reality of the trip, and the recruitment efforts.







\*\*\*students should have access to their notes as they enter their answers

\*\*\*students may also have access to the Stimulus Items as they enter their answers



Stimulus Item #1 — "Why I Volunteered to Die on Mars" (editorial)

Stimulus Item #2— Mars Fast Facts & Infographic

Stimulus Item #3— Mars Recruitment Posters (images)

\*\*Students should take notes as they review the Stimulus Items

Lead a class discussion about issues related to the topic. You are being provided a sheet to help you guide the classroom discussion.

**Extended Responses:** Have students answer the following questions. Remind students to use information from the Stimulus Items to support their response.

- 1. What are the issues that someone must consider if they volunteer to be one of the first humans to travel to Mars?
- 2. Would you volunteer to live on Mars (with no chance of returning to Earth)? What would be the main reason for your decision?

**EXTENDED PRODUCT (Optional):** Divide students into small groups, with each group becoming the Recruitment Team for a "Mission to Mars" (this can be a NASA mission, or a private company conducting its own mission). The goal of each team is to recruit volunteers to go to Mars, even though the trip is very risky, the living conditions will be difficult (compared to Earth), and there is no return trip. Have the groups create a brochure and poster to encourage volunteers to Mars. Groups can present these materials to potential volunteers (i.e. the rest of the class) and try to encourage them to sign-up for the missions.

Rubrics to grade student entries have been provided, and all questions have been mapped to the content standards.