

Lesson 16: Careers in Space

Purpose: To help students understand the variety of careers in space exploration.

Standards

NCTE/IRA Standards for English Language

Arts

Standard 1- Students read a wide range of print and non-print texts...to build and understanding of themselves [and] acquire new information.

Standard 5- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Standard 12- Students use spoken, written, and visual information to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

National Science Education Standards

Science as Inquiry – Content Standard A

1. Abilities necessary to do scientific inquiry.
2. Understanding about scientific inquiry.

History and Nature of Science- Content Standard G

Science as a human endeavor – many people choose science as a career and devote their entire lives to studying it.

Overview

The space environment is an ideal place for some industries to produce better products. A future space industry will be the production of solar energy. In space there is no atmosphere to block the Sun's radiation. Solar cells will collect Sun power and send it to Earth as microwaves. Receiving stations will convert the microwaves to electricity. Mining is another important future space industry. Asteroids are rich sources of metals, including gold and platinum. These materials would be mined and brought back to Earth. These future jobs will use robotics to help humans work in the harsh environment of space.

Understandings

1. Our knowledge and understanding of our Earth and Solar System changes and/or expands as new discoveries are made.

Materials

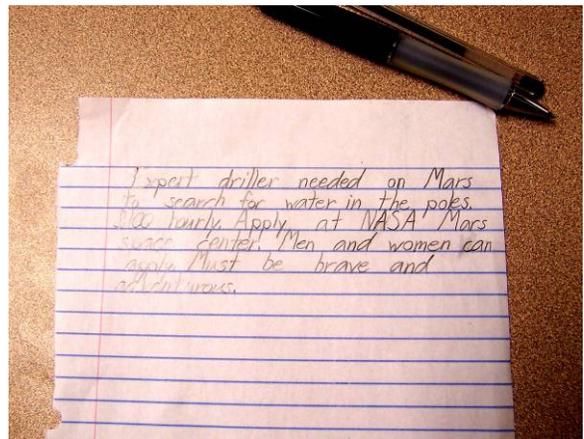
1. Want ads from local newspaper
2. Website:
<http://www.planetary.org/html/mmp/>
3. Paper and pencil
4. Dictionaries
5. Construction paper for Ads

Time

Forty-five to 60 minutes

Directions

1. Have students examine the want ads and discuss the types of jobs advertised. Discuss the need for a variety of professions and the contributions made by different professions.
2. Brainstorm ideas for careers in the future. If settlements are developed on the Moon or on Mars, what services will be needed? How will these needs be met?
3. Have pairs of students design want ads for a paper of the future. *Don't neglect the travel industry (future humans may visit the Moon or Mars on vacation!)*



Extensions

Have your students interview adults in different careers to learn the educational requirements and contributions each career makes to society.

Have the students write a personal narrative about their future career aspirations.