NATURE WATCH

Nature-Watch

www.nature-watch.com info@nature-watch.com 800-228-5816 Phone 800-228-5814 Fax

Space Exploration

Recommended Products:

Starry, Starry Day Activity Kit (#155)
Star Seekers Activity Kit (#107)
Solar System Activity Kit (#132)

Here Comes the Sun-Catcher Activity Kit (#158)

1. Skill Builders (2)

- a. "Learn about at least 4 astronomical phenomena: quasars, pulsars, novas, supernovas, black holes, dwarf stars, giant stars, protostars, etc. Can you observe any of these with the naked eye?"
- b. "Visit a museum, planetarium, observatory or space center & learn the history of space exploration. Make a file of your findings."
- c. Learn about the sun & the moon & their relationship to earth. Do two of the items listed in your book.
- d. "Discuss "the case for space" addressing issues such as: Who owns space? Who owns the moon? What if we find other life in space? Come up with charts & posters depicting your questions & answers."
- e. Science fiction predicts future developments. Read science fiction written in the 1960's or earlier. How do they appear today in light of new information people have about space?
- f. Develop your own space exploration activity.

2. Technology (1)

- a. "Find out about the capabilities of today's telescopes. If possible, visit an observatory or a site on the Web to learn more."
- b. Investigate roles of mathematics & computer simulations in developing theories about the universe. Talk with someone knowledgeable in astronomy or physics if possible.
- c. Design a human space colony. Decide whether it is a station in space or one that will be set up on a planet in this solar system. What conditions need to be considered? Share & explain your design or model with others.
- d. "Build an accurate scale model of a space exploration vehicle. Find out about its design, function & basic operation. Help other learn about your vehicle."
- e. "Construct a "flying object". Be able to explain the scientific principles that governed your design."

3. Service Projects (1)

- a. "Help sponsor an event, space activity day or science career day. Incorporate hands on activities."
- b. Develop a booklet or display that highlights women who have played an important role in the history of flight & space exploration.
- c. "Help Brownie or Junior Scouts learn about space exploration. Do 2: put on a play, tell a story, or share stories from different cultures about the night sky."
- d. "Design a library exhibit about space & astronomy for your school, library or town rec. center. Include books, an activity box & a list of resources in your display."
- e. "Using glow-in-the-dark paint, stars, or reflector tape, make an accurate constellation map on a ceiling. Include a minimum of 12 constellations. Create a guided tour of the ceiling."

4. Career Exploration (1)



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- a. "Check out at least 2 careers & show how they are linked to space programs: biomedical engineering, meteorology, ceramics, chemistry, industrial engineering, materials science, metallurgy, optical engineering, physiology & photography."
- b. "Plan to attend a "space camp" or astronomy camp to get more hands-on experiences."
- c. Contact 2 science societies for professional women related to astronomy or space exploration. What careers are related to space exploration?
- d. List 5 ways you can maintain your interest in space and/or astronomy. Investigate & list space-related places to visit or activities to pursue in your community or on the Web.