

Your kids are already interested in:

- **Shuttle Flights and Living in Space**
- **International Space Station Assembly Missions**
- **Missions to Mars**
- **Stars, Planets, Black Holes, Comets, and more**



You're interested in:

- **Hands-On Inquiry-Based Integrated Thematic Units**
- **Increasing Student & Female Interest in Science, Math, Technology**
- **Activities & Units Aligning with Vt. & Nat'l Standards**
- **Raising Assessment Scores**

Here's how to put them together.

GENERAL PRESENTATIONS

Follow-up sessions with hands-on activities for students may also be scheduled to complement these programs which is strongly encouraged to reinforce the content included in these general presentations. Other programs may be arranged to coincide with NASA's upcoming human and space exploration missions or anniversaries of previous exploration missions.

LIFE ABOARD THE SHUTTLE

How do astronauts live and work aboard the Space Shuttle orbiter? With the visual aid of a full scale "map" of the Shuttle mid-deck, astronaut food samples, a slide and/or video presentation, Gail answers questions that have included: "How do you eat, sleep, and go to the bathroom in space? How fast does the Shuttle travel and how does it get into orbit?" and "When you write in space, do the words float off the paper?" (1½ hours, includes Q/A time at the conclusion. A brief variation of this program can be arranged for Kindergarteners and pre-schoolers.)

TOYS IN SPACE

What happens when you play with toys in space? On April 12, 1985, the Shuttle Discovery flew into space with eleven

familiar toys. A second mission studied additional toys. This hands-on workshop allows students to experiment with these toys, predict how the toys would react in space, and then see the astronauts experiment with the toys during their mission. Voila! Physics and Newton's Laws through fun. (Hands-on physics for grades 3 and up. Minimum of 90 minutes required.)

LUNAR EXPLORATION

If the moon isn't made of green cheese, then what? With this program you can literally bring the moon into your classroom to find out. These small moon rock and regolith (soil) samples are encased in a lucite disk to allow observation with the naked eye, microscope, or magnifying lens. A slide show or videotape of the historic Apollo missions and possible future lunar colony is also part of this presentation. Other hands on activities may be included based on the amount of time given for this program. (Sessions that include the lunar rock samples must be scheduled at least 8-10 weeks in advance due to NASA's scheduling and the availability of the samples. An additional charge of \$20-30 will be included to cover the costs for return shipping the samples to NASA.)

FUTURE SPACE EXPLORATION

Will one of your students be one of the first people to live on Mars 20-30 years from now? What do the next fifty years of U.S. space exploration hold? This program begins with a look at the past, a touch of the present, and on to the future. Find out more about the Hubble Space Telescope, International Space Station, "high tech" careers of the future on Earth and in space, and the possibilities of living on the moon or on Mars. This session is an exciting way to stimulate multidisciplinary activities such as creative writing, the visual and performing arts, as well as scientific investigations. (75 minutes minimum.)

EXPLORING OUR SOLAR SYSTEM

Take a trip through the Milky Way to the inner and outer planets and their moons. (Additional activities for K-3 students includes a story, song and video. Depending on group size and physical space available other activities to teach rotation and revolution may also be included.)

**PLEASE CONTACT VSEP TO DISCUSS YOUR NEEDS
AND OTHER AVAILABLE PROGRAMS.**

SOME POPULAR VSEP PROGRAMS FOR STUDENTS, EDUCATORS, AND THE GENERAL PUBLIC

Life Aboard the Shuttle

Future Space Exploration

(Past, present and future of space exploration: including International Space Station, Lunar and Mars Colonies)

International Space Station (ISS)

Space Shuttle and ISS Mission Simulation

(Multiple-visit, longer-term program is required for pre-flight training and planning activities prior to the mission simulation and mission debriefing)

The Home Planet: Space Views of Earth

(Geography, Earth science, environmental awareness and ecology are included, grade 3+)

Toys in Space (Hands-on physics, grade 3+)

Astronaut Training

Women in Space &/or Careers in Space

Solar System Exploration

Sun-Earth Connection (Why we see Northern Lights [auroras]; sun spots and other solar activity)

Benefits of Space Exploration: Spin-Offs & Technology

Other programs and workshops may be developed to coincide with updoming space events.

PROFESSIONAL DEVELOPMENT WORKSHOPS FOR EDUCATORS

Professional Development includes content, activities, and resources and is available to:

- Help you teach aerospace, space, space science and technology.
- Find exciting resources to use in your classroom.
- Develop classroom simulations and thematic units related to NASA's missions and exploration programs; contextual learning that fits with the education standards.
- Use NASA and other education materials (hands-on).

As a trained Challenger Center International Faculty Member, the "Space Lady" also offers programs created by the Challenger Center for Space Science Education as well as other space education organizations.



VERMONT SPACE EDUCATION PROGRAM

Gail Breslauer, Founder / Director

Vermont Teacher In Space

NASA Space Ambassador

Challenger Center International Faculty

Mad River Valley, PO Box 550

Moretown, Vermont 05660

(802) 496-3795

Fax (802) 496-3765

gbres@madriver.com

<http://www.greenmountainaccess.net/~atiisleddogs>

