Further Exploration

Online Discovery

Explore why we are going to the Moon, what we hope to gain, and how we plan to get there on NASA's Exploration Pages. Video clips, images, and articles highlight upcoming missions, lunar vehicles, and the planning that is underway.
http://www.nasa.gov/mission_pages/exploration/main/index.html

The Exploration Systems Mission Directorate develops capabilities and technology to make human and robotic exploration of our solar system possible — and safe. Find out the latest in exploration engineering!
http://www.nasa.gov/directorates/esmd/home/index.html

NASA's Lunar Precursor Robotic Program oversees robotic missions to the Moon that provide more information about the lunar environment including the Lunar Reconnaissance Orbiter (LRO) and Lunar Crater Observation and Sensing Satellite (LCROSS). **http://moon.msfc.nasa.gov/**

Share simulated lunar regolith with students. This material, used by NASA to create a Moon-like environment during equipment and space suit testing, makes a great comparison to soils found on Earth.
http://www.planet-llc.com/pages/store/simulant.htm

Space artist Pat Rawlings' illustrations share a vision of what it will be like to live and work on the Moon — and other places in our solar system. **http://www.patrawlings.com/default.cfm**

More Classroom Resources

Explore! To the Moon and Beyond with the Lunar Reconnaissance Orbiter —
http://www.lpi.usra.edu/education/explore/LRO/
A suite of hands-on activities that share the LRO mission, explore how our Moon formed and changed through time, and investigate possible sites for a future lunar outpost.

Lunar Camp Teacher Resources —
http://lunar-camp.com/resources/index.html
A plethora of background pages and lesson plans from various sources examine the challenges of establishing a lunar base, from transport to resource mining to aspects of human interaction.

Return to the Moon —
http://www.challenger.org/teachers/lessons/returnmoon.cfm
Through this collection of lesson plans from the Challenger Center, students explore the lunar environment, learn about the geology of the Moon, and build lunar bases.

Additional Reading

Home on the Moon: Living on a Space Frontier. Marianne Dyson, 2003, National Geographic Society, ISBN: 0792271939. Readers ages 10–13 will enjoy learning about the lunar environment and challenges to outposts as they imagine future exploration of our near neighbor in this well-illustrated book. Each chapter includes hands-on activities for further investigation.

Return to the Moon. David Jefferis and Mat Irvine, 2007, Crabtree Publishing Company, ISBN: 0778731170. Loaded with pictures and illustrations, this book provides readers ages 10–13 with a history of our exploration of the Moon, and a sense of the challenges and excitement of living and working at outposts in the future.

About This Poster

This is one of a three-poster set that examines how our geologic understanding of the Moon will be used as we plan to live and work there in the future. The poster **front**, designed for **sixth- to ninth-grade students**, presents the resources available for future lunar outposts. Much of our understanding of these resources is based on data from orbiting spectrometers and other instruments, and validated by Apollo samples. The poster **back** is designed to provide **educators** with background information, ideas for lessons, and resources to support further student exploration. The complete set of posters can be found at **http://www.lpi.usra.edu/education/moon_poster.shtml**.

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Image Credit: NASA and Lunar and Planetary Institute. Paintings courtesy of Pat Rawlings. Titanium images courtesy of In-Situ Fabrication and Repair (ISFR) Group, NASA Marshall Space Flight Center. Clementine image processing by Dr. Paul Spudis.

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