

LPI Resources

Public Engagement in Planetary Science

Whether you are visiting a classroom or museum, giving a public presentation, or setting up a table or booth at an event, LPI has resources for planetary scientists to use in public engagement.

Please contact LPI's Education and Public Engagement department to determine availability. *Select items* may be shipped to you. All others must be picked up at and returned to LPI.*

Displays and Props

- [Lunar Exhibits by the Center for Lunar Science and Exploration*](#)
Designed for libraries, these banners share current lunar and asteroid science and exploration stories. The displays can be borrowed by informal education organizations; complete visuals are also available for download and printing.
- [Moon Posters by LPI*](#) A series of three posters explores what — and how — we know about our Moon's formation and evolution, and how its history affects lunar resources.
- Inflatable Moon (6 foot): requires power and a large space. (The fan is noisy.)
- Hand-samples of rocks, including basalt, anorthosite, volcanic breccia, hematite, specular hematite, dunite, and more.
- Globes of Earth, Moon, Mars; see the LPI library for a greater variety
- LPI tablecloth
- Pop-up displays about LPI
- Plastic tabletop sign holders; see the LPI library for a greater variety
- LPI pop-up display backdrop

Interactive Materials

- Starlab portable planetarium—this older model is very simple to use but limited to the night sky and Moon. You can borrow it after a short training on how to use it.
- New digital portable planetarium—this new model uses a video projector to visualize a large variety of objects—fly over a planetary body, steering it in real time while describing the features! *LPI staff would need to come assist you with it (see Andy Shaner for scheduling and to determine staff availability)*
- Augmented Reality “Lunar and Planetary” app and posters (borrow a tablet with the app from the LPI library use your own device)
- Small 3D tactile models of lunar and martian landforms
- Scales for weighing yourself on the Earth, Moon, Mars, and Jupiter
- Small solar telescope (Coronado)—does not track
- Small Bushnell telescope that can be used to look at the Moon or to project the Sun—does not track
- 3D glasses and select posters; also work with one of the lunar exhibits
- Stereogram planetary images and materials to make a stereogram viewer

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Handouts

- Year of the Solar System Bookmarks*
- Select mission posters (limited numbers)
- Select lithographs, stickers, and more (limited numbers)

Public Engagement Activities

- [LPI's Explore! Program](#): Assorted hands-on space science activities for informal education and public engagement.
- [Dry ice melting demonstration](#): Use a pipet and pliers to show dry ice melting into liquid before erupting.
- [Diet cola and mentos eruption](#): Add mentos to soda to observe an eruption.

Select Public Engagement activities: links to these and more at <https://www.lpi.usra.edu/education/solarsystem/activities/>.

- Paper Strip Scale Solar System Model: Use a strip of paper to model the scale of the solar system. Make a prediction of the scale on one side, then use folds to create and compare a more accurate model on the other side.
- Heavyweight Planet: Jupiter Weigh yourself on scales modified to represent their weights on other worlds to explore the concept of gravity and its relationship to weight
- Lunar Phases: A Dance with the Sun: Model lunar phases outside with the real Moon and Sun in the sky.
- Golf-ball Phases: Explore the dynamics of lunar phases using a golf ball glowing under the ultraviolet light of a blacklight.
- Impact Craters: Determine the factors affecting the appearance of impact craters and ejecta by dropping impactors into a crater box.
- Water Balloon Impacts: Measure the diameter of their water balloons, model an impact, measure the diameter of the "crater" area, and determine the ratio of impactor to crater.

Classroom Resources:

- [ALTA Reflectance Spectrometers, Classroom Sets](#)*available to borrow: These sets include 15 ALTA spectrometers, 32 rocks, and more.
- [Seeing the Moon](#)
Use ALTA spectrometers to demonstrate how to take spectra of rocks and then how those spectra can be used to make a mineralogical map. NOT ideal for public engagement, but can be used for longer sessions with select audiences, with the ALTA spectrometers.

For ideas on other activities specific to particular solar system objects, planetary processes, or for particular audiences, contact the LPI Education and Public Engagement team.