

List of UCLA Science Outreach Activities

Below we've listed the science outreach activities sponsored by Astronomy Live! and the Institute for Planets and Exoplanets. Please take note of the requirements for each activity, and make sure to select an activity that is appropriate for the grade level of your students. For more information about how to apply for an outreach event at your school or a UCLA school visit, go to <http://planets.ucla.edu/outreach/request-an-outreach-event/> or contact iplex@epss.ucla.edu. Don't forget to apply early, as priority will be given to requests made at least 60 days before the event.

Demo	Group	Description	Duration	Grades	Volunteers	Requirements
Make a Comet	Astronomy Live!	We teach students about the origin and importance of comets in our Solar System by making a comet out of dry ice, dirt, water, corn syrup, and ammonia.	20 min	K-6	1	Table
Pocket Solar System	Astronomy Live!	Students learn about distance scales in our solar system, and what would happen if you shrunk our solar system down to the size of a piece of ticker tape!	30-45 min	K-1 (with adult supervision), 2-5	2	Indoor Activity
Water Bottle Rockets	Astronomy Live!	We teach students about the aerodynamics and the parts of a rocket while building a plastic water bottle rocket which we launch with an air compressor.	45 min	3-8	at least 2	Outdoor activity, requires a large space and access to water and power
The Sun and Solar Telescopes	Astronomy Live!	We use a large cross-section model of the Sun to teach students about the layers of the sun, sunspots, and solar flares.	30 min (depends on the number of students)	K-8	at least 2	Outdoor activity, weather permitting, requires power
Stars and Stellar Evolution	Astronomy Live!	Students will assemble a large HR diagram, which teaches them about the temperatures and colors of stars. In addition, we use multicolored beads to show them where different elements in the universe come from.	45 min	3-8	at least 2	N/A
The Shocking World of Electricity	EPSS/iPLEX	Students learn the basics of electricity by observing and using a Van de Graaff generator, then learn how electricity can be produced from sources other than a wall socket (e.g., solar and wind energy).	30 min	K-8	at least 2	Power outlets
Dinosaurs and Fossils	EPSS/iPLEX	Teaches students about fossils, dinosaurs and allows them to make their own fossil casts from clay and plaster of Paris.	1 hr 30 min	K-5	at least 2	Access to water

Meteorite Exhibit	EPSS/iPLEX	Students learn about a wide variety of meteorites, how they came to be and learn to tell the difference between a meteorite and a “meteorwrong” by examining specimens.	30 min	3-12	1-2	N/A
Rocks and Minerals	EPSS/iPLEX	Students examine different types of rocks and minerals to learn what the Earth and planets are made of and how they are used in everyday applications.	45 min	K-6	at least 2	N/A
Vortices Galore!	EPSS/iPLEX	Students use rotating tables/weather-in-a-tank apparatus and food coloring to learn about Coriolis forces, and natural phenomena like hurricanes, tornadoes and the Great Red Spot on Jupiter.	30-45 min	K-8	at least 2	Requires water and power
Natural Disasters: Earthquakes	EPSS/iPLEX	Students use liquefaction tank, elastic rebound table, and ground motion demos to learn about earthquakes. Students will also be taught earthquake safety drills.	45 min	K-8	at least 2	Requires water and power
Space Missions	EPSS/iPLEX	Students learn about current missions: Diviner, Artemis/Themis (terrella, magnetic fields), Elfin (spacecraft engineering)	1 hr	3-8	at least 3	Requires power, tables

