

Explore the Moon with NASA eClips!

For as long as we can remember, Earth's Moon has inspired and perplexed us. This newsletter is filled with videos and activities to continue building learners' lunar-wonderings as NASA sets its sights on continuing lunar-wanderings.

In this edition:

- **NEW** K-12 Videos about Lunar Rocks
 - *Our World* "The Stories Moon Rocks Tell"
 - *Real World* "Using Math and New Tech to Study Lunar Rocks"
- **NEW** Ask SME Career Connection Videos Featuring Moon Rock Experts
- NASA eClips Moon Resources
- Can Plants Dance? Spotlight Design Challenge
- Partner Resources

K-12 Videos about Lunar Rocks

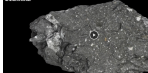


[Our World "The Stories Moon Rocks Tell"](#)

More than 50 years ago the Apollo missions brought Moon rocks, core samples, pebbles, sand, and dust back to Earth. While scientists have been studying these lunar samples for years, researchers at the Astromaterials Acquisition & Curation Office are using new instruments and modern technology to study and analyze six preserved core samples.



CT (Computer tomography)
Scanning



[Real World "Using Math and New Tech to Study Lunar Rocks"](#)

Lunar rock samples, gathered more than 50 years ago, continue to reveal mysteries about our nearest neighbor, the moon. This RealWorld video explores techniques used to protect and preserve the moon rock samples, and showcases the role mathematics plays in this process.



[NASA JSC Astromaterials 3D](#)

Astromaterials 3D is a virtual library for the exploration and research of NASA's space rock collections. Everyone can explore NASA's space rock collections using this tool.



Interact with NASA eClips on one of these platforms!

<https://nasaclips.arc.nasa.gov>



Ask SME: Close-up with a NASA Subject Matter Expert Videos

Lunar Sample Curator - Dr. Ryan Zeigler



In this close-up video, Dr. Ryan Zeigler, Lunar Sample Curator at NASA's Johnson Space Center, shares his excitement in taking care of NASA's moon rocks. He clearly loves the field of geology and shares insight into the responsibilities of curating the priceless lunar rocks.



Senior Sample Processor, Lab Manager - Andrea Mosie



In this close-up video, Andrea Mosie, Apollo Sample Processor at NASA's Johnson Space Center, shares her passion for her work with moon rocks. She describes the changes she's seen in the Astromaterials Curation Office over the years and encourages listeners to set their own goals and take control of their destiny.



Astrobiologist - Dr. Danny Glavin



In this close-up video, Dr. Danny Glavin, Astrobiologist at NASA's Goddard Space Flight Center, shares his journey in becoming a 'rock star' for NASA and how communication is an essential part of his job.



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NASA eClips Moon Resources

Guide Lites: Crater Maps



In this activity, participants will make a crater map and compare the geologic features of the Moon to those on Earth.



Guide Lites: Distance to the Moon

In this activity, participants will use sports balls as scale models of Earth and the Moon and use string to demonstrate the mathematical relationship between the size of Earth and the Moon and the distance between the two.



Best Practices: Distance to the Moon Demonstration

This video shows the materials needed and how to engage learners to complete the activity.



Moon Resources

Educator Guide: Crater Maps and Earth Landforms



In this activity, participants compare Earth's landforms to landforms found on the moon and learn about the NASA Lunar Reconnaissance Orbiter, or LRO, and how NASA learns more about the moon through satellite observations



Educator Guide: Dirt



Working in teams, students create several slides of Earth soil for analysis. Through NASA eClips(TM) video segments, students review the rock cycle for rocks on Earth and learn about three types of lunar rocks. Students analyze simulated lunar regolith to make inferences about the formation of regolith. Student understanding is assessed using overlapping circle Venn diagrams.



Our World "The Rock Cycle"



Find out how rocks brought to Earth by the Apollo astronauts have helped NASA learn more about the rock cycle. Compare igneous, sedimentary and metamorphic rocks found on Earth to three types of rocks found on the moon.



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Can Plants Dance? Spotlight Design Challenge

The challenge: As botanists or someone who studies plants, your challenge is to gather and share evidence to confront the misconception that plants can't move. Create a video that captures your questions and findings.

Follow these steps to think and act like scientists as you dig through data and experiment to support a claim that confronts a misconception.

Misconception: Plants can't move.

CLAIM 1: Some plants move in response to light.

CLAIM 2: Gravity influences some plants' movement.

CLAIM 3: Some plants move toward water.

[Click here to view the NASA Spotlight Design Challenge "Can Plants Dance?"](#)

[Spanish version webpage](#)

Project Timeline

Challenge Kickoff
January 15

Produce Videos
January - March

Submit Videos by
March 22, 2024

If you have any questions, please feel free to reach out to our Teams:

Fairchild Program (challenge@fairchildgarden.org)

NASA eClips™ Program (nasaclips@nslanet.org)



[NASA Spotlight "Can Plants Dance?"](#)



Can Plants Dance? Webinar Recording

Thank you to all of our participants and partners who joined us virtually!

Couldn't attend?

[Click here to view webinar recording](#)

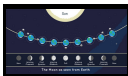
PARTNER RESOURCES



NASA Space Place

All About the Moon:

- What are the Moon's phases?
- Supermoon, Blood Moon, Blue Moon, and Harvest Moon
- How far away is the Moon?



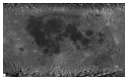
Infinscope

- Phases of the Moon Lesson:
 - Also available in Spanish.



Astromaterials

- Astromaterials 3D is a virtual library for the exploration and research of NASA's space rock collections. Everyone can explore NASA's space rock collections using this tool.



Moon Trek

- Moon Trek is an application that allows you to view imagery and perform analysis on data from this celestial body.

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