

CHALLENGER LEARNING CENTER



Photo Credit: 2024 Blue Origin LLC
New Glenn, The Foundation for a New Era

Welcome to the 2024-25 school year!

We are thrilled to announce the re-imagining of the Challenger Learning Center, now more dynamic and engaging than ever before! With new missions and program updates, our center is ready to welcome students for an immersive learning experience.

The new missions offer fresh, innovative challenges that will ignite curiosity and inspire a passion for STEM as well as bring to life the future of the space workforce. Learners will explore new frontiers in space and science with cutting-edge technology and hands-on activities designed to captivate and educate. From lunar landings to explorations of our own planet, our updated missions promise to enhance teamwork, problem-solving, and critical thinking skills in a fun and interactive environment.

We invite you to bring your students to experience these exciting new programs and see firsthand how we are redefining educational adventures. Check out the “How do we schedule a visit?” section to get started!

Coordinator of Gifted,
STEM and Personalized Learning

Heather Townley

Issue 1 Content

What are the new missions?

Check out Expedition Mars and Lunar Quest! Coming soon...Operation Comet and Earth Odyssey!

How do we schedule a visit?

Visit this section to learn more about scheduling a mission!

What's happening in space?

Let's take a look at what is happening in space this month!

Science Snapshot

Visit this section for quick and engaging science content focused on space!



2024-25 MISSIONS



The year is 2076. A handful of facilities have been established on Mars: a greenhouse, a mobile geological survey base, and a centralized research habitat. The primary human habitat is not on Mars, but on one of its moons, Phobos. A Spacecraft regularly ferries astronauts and scientists between the base on Phobos and the surface of Mars. The Spacecraft also carries parts to build a remotely operated vehicle (ROV) to continue the search for evidence of life and water. However, when crew members discover an imminent threat to their Spacecraft and the Martian surface facilities, they must act quickly to save their stations, their research, and their lives.

NASA recently launched a Rover (ROV) to the Moon to explore new areas and collect critical scientific data. However, the ROV lost power before any of the findings were sent back to Earth. A faster and more reliable process to gather this type of information is needed. The result is a new directive from NASA - human astronauts will return to the Moon!

A team of astronauts must board a Spacecraft and launch to the Moon in search of a long-term habitat on the Moon. A team of scientists and engineers are stationed in Mission Control on Earth to command and assist the astronauts. Once the spacecraft crew successfully lands on the Moon, they must deploy a Lunar Exploration ROV to identify a suitable location for a sustainable long-term human habitat.

However, when the crew receives troubling readings from below the Moon's surface, the two teams must work together and make critical decisions to turn a potential catastrophe into NASA's finest hour!



A satellite that's been collecting data about Earth is malfunctioning. Your students will collaborate to capture the satellite using a robotic arm, download the data, and identify new information to analyze, test, and explore Earth.

COMING SOON



A large comet is passing close to Earth soon. It's a perfect opportunity to study and explore long-period comets. As a crew of astronauts, scientists, and researchers, your students will collaborate on building technologies to study the comet and share their data with Mission Control scientists.

SCHEDULE A MISSION!



Begin your visit with mission orientation where astronauts receive their mission details and job assignments.

Join your fellow astronauts as the mission begins on the Spacecraft where research must be completed in order to meet the mission goals.



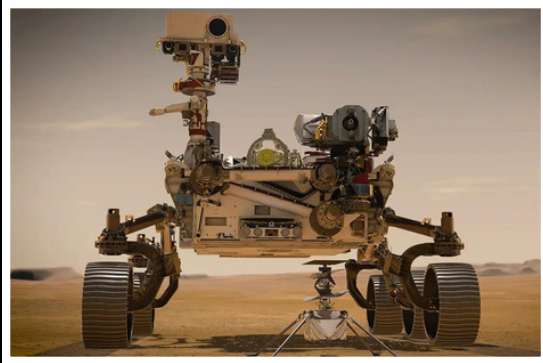
Lead your crew through a successful mission from Mission Control. Keep the crew safe and you never know, soon you might be in the Spacecraft!

[Schedule a mission or request information!](#)

WHAT'S HAPPENING IN SPACE?

2020-NOW RECAP!

2020



The Mars 2020 Perseverance Rover searches for signs of ancient microbial life, to advance NASA's quest to explore the past habitability of Mars. The rover is collecting core samples of Martian rock and soil (broken rock and soil), for potential pickup by a future mission that would bring them to Earth for detailed study. (nasa.gov)

[Learn more!](#)

NASA successfully landed the Perseverance rover on the surface of Mars, and piloted the Ingenuity Mars Helicopter – the first powered, controlled flight on another planet. (nasa.gov)

[Learn more!](#)



2020



2022

Behind the curtain of dust and gas in these “Cosmic Cliffs” are previously hidden baby stars, now uncovered by James Webb Space Telescope.

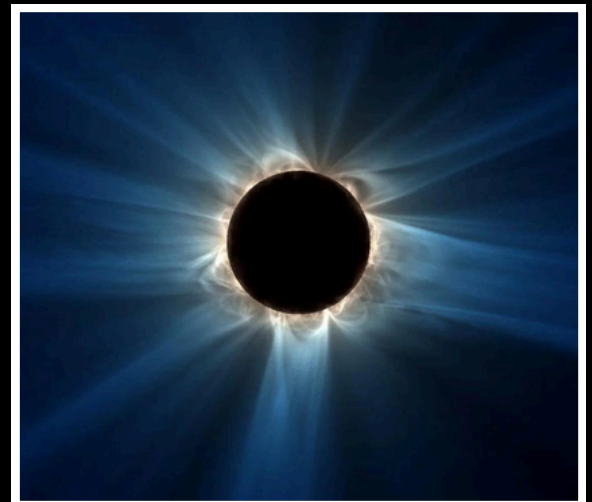
Credits: NASA, ESA, CSA, and STScI
[Learn more!](#)



Frank Rubio spent 371 days in space, breaking the record for the longest single flight by an American astronaut.

[Listen to his interview!](#)

2023



2024

Did you catch the total solar eclipse in 2024?

[Relive the memories with NASA's broadcast!](#)

SCIENCE SNAPSHOT: THE MOON

K-4

You Are Going

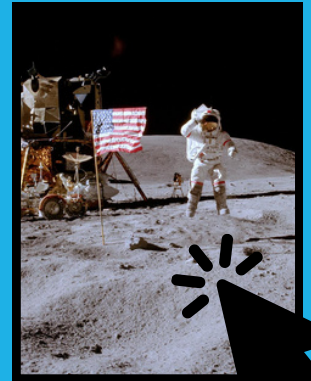
Introduce learners to the Artemis missions with this picture book and teacher guide!



5-8

Landing Humans on the Moon

Four standards-aligned activities help students learn about the Moon and create a model of a human landing system for the lunar surface. Using science, engineering and geometry, students design, build and test model spacecraft.



9-12

Moon Anomalies

Want to start a good debate in science class? Or step into science in your language arts class? This one is for you! Learners will be able to research and develop arguments for one of four moon anomalies.

