Too many learners lose interest in crucial STEM subjects at an early age—limiting future opportunities and career options. To succeed in a rapidly changing world, students and learners of all ages need exposure to a variety of fields, chances to work with their peers in real-world scenarios, and experiences that open their eyes to new possibilities for the future.

The Challenger Learning Center at SC4 in Port Huron, Mich., offers experiences that go far beyond a typical field trip or team-building activity for 5–12th grade students and educators!

**KEY TAKEAWAYS:**

- Experiences take place in Briefing, Transport, Spacecraft and Mission Control rooms.
- Aligned with 5–8th grade national education standards (scalable for 8th grade+) and includes pre- and post-mission activities.
- Builds important 21st-century skills like critical thinking, problem-solving and collaboration.
- Deepens understanding and knowledge of essential STEM topics and careers.
- Ignites a passion for learning.

RESERVE YOUR MISSION TODAY!

challenger.sc4.edu | experiencecenter@sc4.edu | (810) 989-5789
Launch to the Moon in search of a long-term human habitat.
Command and assist in Mission Control, or board the Spacecraft as an astronaut.
Help deploy a Lunar Exploration Rover to investigate areas of the lunar surface.
Make critical decisions to turn a potential catastrophe into NASA’s finest hour!

Major STEM concepts

- Study lung tissue samples to analyze the impact of radiation exposure during space flight.
- Explore lunar surface features and properties that could protect astronauts.
- Conduct experiments to test the efficiency of solar panels used as an energy source during the mission.

Hands-on labs

- Use a digital microscope to explore and analyze lung tissue samples.
- Design electrical circuits to troubleshoot and determine functionality of solar panels.
- Assemble/troubleshoot the parts of the Rover required for the mission.
- Conduct experiments to measure the mass of rock samples and calculate the density.

Lunar Quest software program is 508 compliant and includes text read aloud and font resizing for students.

The Challenger Learning Center at SC4 is part of Challenger Center’s network of Challenger Learning Centers and a collaboration with Unity in Learning, which consists of the Ann Arbor Hands-On Museum, the Leslie Science & Nature Center, the Yankee Air Museum and St. Clair County Community College (SC4).

RESERVE YOUR MISSION TODAY!
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**Objectives:** Conduct health assessments to ensure the safety of the crew in the Spacecraft.

**Branches of Study:** Anatomy and Physiology, Biology, Nutrition, Health Sciences, Counseling/Mental Health Awareness

**Career Connections:** Nutritionist, Counselor, Emergency Medical Technician, Nurse, Doctor, Medical Assistant

**Objectives:** Calculate and plot the Spacecraft’s course to the Moon and back to Earth.

**Branches of Study:** Aviation, Aerospace Studies and Operations

**Career Connections:** Pilot, Aerospace Engineer, Air Traffic Controller

**Objectives:** Design/assemble the ROV that is launched to the Moon to search for lava tubes.

**Branches of Study:** Engineering, Network Support, Information Technology, Communications Technician

**Career Connections:** Computer Scientist, Mechanical Engineer, Structural Engineer

**Objectives:** Conduct experiments and collect data to analyze the efficiency of the solar panels on the Spacecraft.

**Branches of Study:** Meteorology, Astronomy, Environmental Engineering

**Career Connections:** Meteorologist, Electrical Engineer, Astronomer

**Objectives:** Collect data and analyze physical features of the landing sites on the Moon.

**Branches of Study:** Physical Sciences, Geology, Environmental Sciences

**Career Connections:** Geologist, Chemical Engineer, Seismologist, Land Surveyor

**Objectives:** Conduct experiments and investigate lung conditions that can occur due to radiation exposure.

**Branches of Study:** Laboratory Sciences, Respiratory Diseases, Infectious Diseases

**Career Connections:** Biologist, Respiratory Therapist, Epidemiologist, Lab Technician

**Objectives:** Conduct experiments to determine if solar panels are functioning and then create a coding program for the robotic arm to replace the appropriate panels.

**Branches of Study:** Coding, Electrical Engineering, Computer and Informational Technology

**Career Connections:** Electrical Engineer, Computer Scientist, Computer Programmer, Systems Technician

**Objectives:** Conduct experiments and troubleshoot the systems on the Spacecraft to ensure the environment is safe for the crew during the flight.

**Branches of Study:** Engineering, Environmental Health and Safety

**Career Connections:** Environmental Engineer, Chemist, Systems Technician

**Objectives:** Serve as the communications leader between Mission Control and Spacecraft.

**Branches of Study:** Communications, Physical Sciences/Sound Waves

**Career Connections:** Communications Engineer, Satellite Engineer, Systems Technician

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What mission(s)/experiences are you interested in scheduling? (Prices starting at $750 per mission. Summer Camp costs may vary.)

- Mission Lunar Quest (Half day experience. Min. 18 guests/Max. 35 guests)
- Lunar Quest Mission + Experience Center (Full day experience. Min. 36 guests/Max. 70 guests)
- Galaxy Quest STEM Summer Camp

Does your school qualify for free and reduced lunches? If so, your school may qualify for 50 percent off the cost of a visit while funds are available.

- Yes  
- No  
- I don’t know

If your school does not qualify for free and reduced lunches or needs additional support, you can apply for scholarship support by stating below why your school/group is interested in visiting the Challenger Learning Center at SC4 or the Experience Center.

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Preferred date for visit (after May 2, 2022):

First choice: _______________  Second choice: _______________  Third choice: _______________

If school guests, what grade(s)?______________________________________________________________

Does your group have any special needs?_____________________________________________________

Questions or comments?_____________________________________________________________________

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Name __________________________  Email __________________________  Phone number ________________

Address __________________________  City/State __________________________  Zip ________________

School or organization name ________________________________________________________________