



Inspiring. Exploring. Learning. It's Our Mission.



Destination: Discovery
Lift-Offs: Daily

It's always perfect launch weather when students venture beyond their schoolyards and enter the Challenger Learning Center of Maine.

HANDS-ON LEARNING THAT IS INTEGRATED INTO YOUR CURRICULUM

CLC is a non-profit education organization that was founded to honor the astronauts lost during the Challenger 51-L Space Shuttle tragedy in 1986. As part of a network of Challenger Centers around the world (challenger.org), the Challenger Learning Center of Maine strives to be the premier educational institution for space and earth science in the State of Maine. Through our programs, the commitment to education that exemplified the Challenger 51-L mission continues to make an impact on students, teachers, and families today.

"Science applies to every job in life. Every teacher should take the opportunity to take their kids here. It's worth it to see their excitement in learning."
- Chad Bell, teacher
Millinocket Middle School

A mission at the Challenger Learning Center (CLC) is not a field trip. It is a deeply grounded learning experience that engages students and transforms them into scientists, engineers, or researchers, placing them in a simulated space mission where they solve real-life challenges. Embedded throughout the on-site mission component of the program are opportunities for students to apply the skills they have learned in the classroom. CLC offers realistic mock-ups of Mission Control and an orbiting Space Station where students join teams at computer consoles or onboard the orbiting space lab, rev up their imaginations, and work together toward the mission's goal, whether it is the launching of a probe to intercept a comet, repairing a satellite, or safely landing on the moon. The simulation creates a cooperative

learning atmosphere underscored by teamwork, communication, problem-solving, and decision-making.

Our staff of certified teachers creates positive learning experiences that raise students' expectations of success. They foster a long-term interest in science, technology, engineering, and math, and motivate them to pursue careers in these STEM fields. Our programs are specifically designed to provide students with an authentic encounter with science and technology. Regardless of a student's cultural background, economic situation, gender, learning style, or academic level, every Challenger Learning Center simulation provides students with an exciting opportunity to succeed. Students return to school with a renewed spirit of camaraderie and boosted self-esteem.

Like your school(s), through our missions and public programs we are working to create a scientifically literate population that can thrive in a world increasingly driven by information and technology. We envision a global community where students command their own destinies by developing skills in decision making, teamwork, problem solving and communication. This vision is based on a realistic assessment of the skills needed for success in the 21st century.

We want to book a mission for YOUR STUDENTS to have the learning experience of a lifetime! Please call Jennifer Therrien for information: (207) 990-2900 x. 3 or jtherrien@clcofme.org

Engage. Educate. Empower. Inspire the next generation of explorers and innovators.

Student Missions

MLRs ADDRESSED



To excite students about the scientific approach to viewing their world, the solar system and the universe, the CLC provides experiences that require personal observation, data collection, interpretation, and model development.

We embrace a pedagogy that promotes scientific literacy by encouraging exploration and inquiry as the essence of learning. Using space as the “hook” to engage students, our simulated space mission programs engender a rich mixture of the essential skills of inquiry.

While they are at the Challenger Learning Center of Maine, students engage in hands-on/minds-on learning that is tied directly to the Maine Learning Results. They will surely enjoy the experience, but this is not a field trip. The purpose of the work they will do at the Center will be to enhance the in-class work and provide activities that would not be possible in the classroom. The environment and expectations at the Center motivate all students at all learning levels to excel; working together to solve problems, communicate effectively, make decisions and collaborate. All students aspire to be successful in their tasks, an attribute which can carry them forward in their future pursuits.

STANDARDS	GRADE/ LITERACY level	MOON MISSION	EARTH MISSION	COMET MISSION
<i>Science & Technology</i>				
A-1 Systems, a	3-5, 6-8	●	●	●
A-1 Systems, b	9+		●	
A-2 Models, a	3-5, 6-8, 9+	●	●	●
A-3, Constancy and Change, a, b	3-5	●		●
A-4, Scale, a	3-5	●		●
A-4, Scale, b	6-8, 9+	●	●	●
<i>Skills & Traits of Scientific Inquiry</i>				
B-1 Scientific Inquiry, c, d, e	3-5, 6-8, 9+	●	●	●
B-1 Scientific Inquiry, a, b, f	6-8, 9+	●	●	●
B-2 Technological Design, a	3-5, 6-8, 9+	●	●	●
B-2 Technological Design, d, e	9+	●		●
<i>Scientific & Technological Enterprise</i>				
C-1 Understandings of Inquiry, a, b	3-5, 6-8, 9+	●	●	●
C-1 Understandings of Inquiry, c	6-8	●	●	●
C-2 Understandings of Science Technology, a	3-5	●		●
C-2 Understandings of Science Technology, a	9+		●	
C-2 Understandings of Science Technology, b	3-5, 6-8, 9+	●	●	●
C-3 Science, Technology & Society, a	3-5, 6-8, 9+	●	●	●
C-3 Science, Technology & Society, c	6-8	●	●	●
C-4 History & Nature of Science, a	3-5, 6-8	●	●	●
C-4 History & Nature of Science, b	6-8, 9+	●	●	●
<i>Physical Setting</i>				
D-1 Universe & Solar System, a	3-5	●		●
D-1 Universe & Solar System, a, b	6-8, 9+	●	●	●
D-1 Universe & Solar System, d	9+		●	
D-1 Universe & Solar System, c, d, f	6-8		●	
D-2 Earth, d, e	3-5	●		
D-2 Earth, e	3-5			●
D-2 Earth, b, d, e,	6-8		●	
D-2 Earth, a, c, d	9+		●	
D-3 Matter & Energy, j, k	6-8, 9+		●	
D-3 Matter & Energy, d	9+	●		●
<i>Mathematics</i>				
Functions and Relations, 3	3-5, 6-8, 9+	●	●	●
<i>Career & Education Development</i>				
B-2 Skills for Individual / Personal Success in the 21st Century	3-5, 6-8, 9+	●	●	●
B-3 Education & Career Information	3-5, 6-8, 9+	●	●	●
C-3 Influences on Decision Making	9+	●	●	●



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All Challenger Learning Center missions integrate the **MLR Core Standards** that are built upon the following Guiding Principles:

- *Clear and effective communicator*
- *Self-directed and lifelong learner*
- *Creative and practical problem solver*
- *Responsible and involved citizen*
- *Integrative and informed thinker*



Challenger programs are flexible in nature and we are glad to offer modifications that will best meet each school's curriculum.

In addition to the simulation experience, participation in CLC programs gives schools access to several weeks of **pre- and post-mission curriculum materials** and **support** from our Education Director, allowing teachers to fully **integrate the mission** into the curriculum. Each year of participation teachers are given **professional development**, new curriculum ideas, and guided access to **NASA materials**. We also provide periodic announcements on **science opportunities for the classroom**, grant ideas, and schedules of web and pod casts, all for no additional charge.

MISSION SCENARIOS OVERVIEW

SCENARIOS	GRADE	CONTENT	PRO. DEV.	MISSION LENGTH	COST
Rendezvous w/Comet	5-10	Universe	Workshop	2.5 hours	\$625
Rendezvous w/Comet-Halley	5-10	Universe	Workshop	2.0 hours	\$625
Return to the Moon	6-10	Universe	Workshop	2.5 hours	\$625
Orbit the Moon	4-5	Universe	Packet	1.5 hours	\$450
Encounter Earth	6-10	Earth	Workshop	2.5 hours	\$625

Rendezvous with a Comet™ A team of scientists and engineers are on a daring mission to launch a probe to collect scientific data from a comet. What seems at first to be a routine exploration is filled with challenges and emergencies. Each obstacle that stands in the way of a successful mission requires students to work together as a team and problem solve the solution.

Return to the Moon™ The year is 2020. For the first time since 1972, a crew of astronauts is returning to the Moon. Their mission is to establish a permanent base on the Moon to observe and explore, as well as test the feasibility of off-Earth settlements. Navigating their way into lunar orbit, students must construct and launch a probe, and analyze a variety of data gathered from the lunar surface to select a site for establishing the permanent Moon base.

Orbit the Moon The year is 2012. In preparation for the astronauts return to the moon in 2015, a team of astronauts and engineers must work together to complete science experiments and research to ensure the success of future missions.

Encounter Earth™ A Low Earth Orbiting Satellite (LEO) has malfunctioned and must be replaced. The elite Emergency Response Squad, ERS-1, has been called in to construct and deploy a new satellite and retrieve important data about the Earth and its environment. Students collect data, avert disasters on Earth, and learn about the intricate relationships of Earth's atmosphere, hydrosphere, biosphere, ecosystem, and geosphere systems.

COMPLETE MLR CORRELATIONS ARE AVAILABLE ON THE REVERSE AND AT www.clcofme.org