



Dresser-Rand Challenger Learning Center
of The Twin Tier Region

Director: Fred Welch
Phone: (716) 379-8686

Fred@DRCLC.org
Fax: (716) 379-8687



Earth Odyssey Missions
(Grades 9 & High School)

School/Group Name: _____

Address: _____
Street City State Zip

Contact Person: _____ Telephone: _____

Email address: _____

Is your school interested in Teacher Professional Development Workshop? Yes No

Simulated (2-hour) Missions:

Earth Odyssey using the Center's Simulator \$800

Fast forward to a future solar max – a time when the greatest solar activity in the 11 year solar cycle of the sun takes place. A major coronal mass ejection (CME) occurred just four weeks ago, with a burst of solar winds blasting from the sun toward Earth. The threat caused an immediate evacuation of the Space Station to ensure the safety of our astronauts in low Earth orbit. Fortunately, the Space Station was unharmed, but some satellites were not as lucky.

It will take a true team effort of scientists from the Mission Control crew and astronauts in the Space Station to fix this serious problem. The two groups will have to quickly address the damage and achieve two major goals: *Use their location in space and the instruments on the Space Station to observe the Earth and its changes and utilize the small manufacturing facility on the Space Station to create a new micro satellite to replace the one lost in the CME.*

- Earth Odyssey missions are designed **for ages 13 and above** and can accommodate groups of 16-30 people.

EVA(s) (Extra Venue Activity) are 2 hour hands on, STEM activities all tied to The Common-Core \$125

- **Our Great Rocket Design Challenge (GRDC)** applies rocketry principles to design, construct, test and launch an air-powered rocket using real-world problem-solving simulation. Teams will form rocket companies and compete in a commercial endeavor to construct a rocket. Through a strong interdisciplinary approach balancing science, technology, engineering and mathematics, the teams will develop a budget, purchase construction materials and track expenditures while designing and constructing their rockets.
- **ENGINE WORKS** Motors are used in many facets of our lives. Most people don't think about how they work or what causes them to not work. This program offers answers to these questions and more. Participants will use tools to fully dismantle a lawnmower engine and learn about the inner workings of a gas powered combustion engine. They will then have the challenge to reassemble the motor into a working machine. At the conclusion of this activity, participants will have a better understanding of how an engine works and it's basic engine parts.

Mission Request -Comet -Mars Date(s) _____ Total Students _____ Grade(s) _____

Mission time slots available: 9:00 to 11:00 11:30 to 1:30 No Preference

Arrival Time _____ Departure Time _____ Lunch, Brown Bag in Center? Yes No

BILLING INFORMATION Billing Address (if not the same as the school information)

Institution: _____ Address: _____

City, State, Zip: _____

Accounts Payable Contact Information: Name _____ Phone #: _____

AMOUNT DUE:

Total number of participants (students): _____ Number of missions required: _____

(1 mission = 18 to 30 students); (2 missions = 31 to 60 students); (3 missions = 61 to 90 students); (4 missions = 91 to 120 students)

Total # Missions: _____ x \$800.00 = amount due for missions: \$ _____

EVA (*Extra Venue Activity*), Hands-on STEM offerings:

Number of GRDC groups _____ x \$125.00 = amount due for GRDC: \$ _____

Number of Engines groups _____ x \$125.00 = amount due for GRDC: \$ _____

Total due (Sum of amount due for missions and GRDC): \$

\$

Teacher training presented at our facility (Required for all teachers) Please list the teachers that need training.

NYS schools: copy of COSER authorization form for the total number of missions needed.

Others: Check # _____ or PO # _____ (full amount)

This form must be returned to us NO LATER THAN two weeks (2 weeks) before your scheduled mission by fax or US-mail

Dresser-Rand Challenger Learning Center Policies

Payment policies:

- A copy of the **NYS BOCES COSER authorization form**, a **purchase order** or a **check** must accompany your **Registration Forms**.
- **BOCES COSER information:**
- COSER 402 is used for Challenger Learning Center mission payment by NYS schools.
- NYS schools can get substitute reimbursement for teacher training using COSER 529.
- NYS districts outside the Cattaraugus-Allegany BOCES should check with their local BOCES about Cross-Over COSERs.
- **Payment by Purchase Order:** Purchase Orders will only be accepted for the total amount. Partial-payment purchase orders cannot be accepted and will NOT reserve your mission(s). A signed purchase order will reserve you mission(s). If your BOE/school requires a signed Purchase Order to facilitate payment, we will accept an attached or faxed purchase order and will return it with our signature promptly. Our fax number is 716-379-8687 ATTN: Fred Welch, Director. We appreciate your cooperation in this matter.
- **Payment by Check:** Checks for the full mission cost should be made payable to **Challenger Learning Center of the Twin Tier Region, Inc.**

Cancellation/Re-scheduling Policies

- Schools canceling their mission(s) for other than emergency purposes with less than one month notice (20 school days) will be billed \$100 per mission.
- Missions may be re-scheduled up to one month prior to your original scheduled mission date. Please note: first choice for mission times may not be available when re-scheduling.

Snow (weather) policy:

- Please call 716-379-8686 if you are unable to attend due to inclement weather. The Challenger Learning Center will call you if we are closed due to weather.
- When the Challenger Learning Center or your school district is closed due to weather, we will re-schedule your mission(s) at no additional fee.

My signature below confirms that I have read, understand and accept all of the policies as stated on behalf of my school as part of the Registration Contract with the Dresser-Rand Challenger Learning Center.

Administrator's Signature (Supt. or Principal or Curr. Coordinator)

Date

This form must be returned to us NO LATER THAN two weeks (2 weeks) before your scheduled mission by fax or US-mail.