



2016 Mars Rover Celebration

Celebration Rules

All Entries Must Include A Model of a Robotic Martian Surface Rover

1. Student teams will design and construct a model of a robotic Martian surface rover. The rover will carry out a specific, student-defined science mission on the surface of Mars. The model will be small enough to fit into an ordinary grocery bag, will be designed to display on a table top, and will cost no more than \$25 for model materials (excluding solar power kit).
2. Models will be entered and judged in the **Solar Power Kit**, the **Radio Control car**, or the **Free-Form** category.
 - a. A **Solar Power Kit** entry is a model built using a teacher-provided Kelvin Scientific Solar Racer Kit Model 840693, a Pitsco Sunzoon Lite Kit, or equivalent (less than \$15). The model's wheels or its internal parts must move when the model is held up to a light source.
 - b. A **Radio Control (RC) Kit** entry is a model built using a specified low cost RC car as the base. Eligible kits include Kelvin Model 280511 and Nikko 1:18 Scale Remote Control Cars available on line from Outpost.com. These kits are the only entries allowed to use batteries. Don't overload it. It should still move. The original body can be removed. Instrumentation should be added. An unadorned original "from the box" model is not an entry.
 - c. A **Free-Form** entry is not required to move, but hey why not? Free Form entries may use stored mechanical energy (like some wind-up gizmo), but **MAY NOT USE** batteries or electrical power from a wall socket (or similar shock hazard).
3. Models must be the work of the submitting team. An adult should do any soldering unless a student has had appropriate training and is supervised. The students must do all other work.
4. Creative use of found objects and discarded household items is encouraged - these items will be considered "no cost" (\$0) when calculating total model cost.
5. A complete entry will consist of a) a model of a robotic Martian surface rover b) a "guide" booklet describing the mission and the model on the form(s) provided, c) a team effort plan documenting each member's contribution, d) receipts documenting expenses, and e) a presentation skit (less than 5 minutes) performed for the Judges during the contest.
6. Judges will probably ask questions after the skit (less than 5 minutes).
7. Model entries will be sorted and judged by grade-level group:
Primary (Grades 3-5) and Middle School (Grades 6-8)
All members of a participating team must be in the same grade-level group. Entries may come from schools, home schools, scout groups, church youth groups, or other youth organizations.
8. Teams may consist of 1-4 students or youths, all from the same grade group. Individual entries are allowed, but we strongly encourage students to work in teams.
9. If a school or youth group holds an internal process to select entries, the teams should stay intact. No "all-star" teams, please.
10. The maximum number of entries will be 120 teams in each grade-level group. Nominally, this will comprise 3 teams each from 40 entering groups. If there are fewer than 40 entering groups, all entering groups will be notified regarding number of allowed entries. Two-three adults must stay with each group entry of 3 teams and



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assist in crowd control or as otherwise requested. Adults exceeding the one adult per team ratio are urged to stand at the wall of the room or attend a college admission presentation.

11. The decisions of the Judges are final.