**MARS ROVER COMPETITION 2025**

**UNIVERSITY OF HOUSTON**

**MARCH 22, 2025**

Fort Settlement has competed in the UH Mars Rover competition since 2002! Each year we take individual and team rovers and habitats to compete against other schools in the Houston area. There are 4 categories in the competition, you can pick one to compete in. If you want to complete, you must sign up with Ms. Staley in Rm 428 by February 13th, so that she can get you officially registered by the UH deadline online.

**Rules & Guidelines**

Student teams will design and construct a physical model of a robotic Martian surface rover or habitation. The rover/habitation will carry out a specific, student-defined science mission on the surface of Mars.

Teams may consist of 1-4 students, all from the same grade group. Individual entries are allowed, but we strongly encourage students to work in teams.

Physical models should be small enough to fit into a grocery bag, designed to display on table top, and cost [no more than $25](https://www.amazon.com/dp/B09BQQRKLW/).

**Models will be entered and judged in either the Solar Power, Radio Controlled Car (RC), the Free-Form, or Habitation category.**

**A Solar Power Kit entry** is a model built using a teacher-provided [KELVIN Educational Solar Racer I Kit](https://kelvin.com/kelvin-solar-racer-i-kit_840693.html) (Model 840693), a [Pitsco SunZoon Lite Solar Car](https://www.pitsco.com/SunZoon-Lite-Solar-Car), or equivalent (less than $15). The model’s wheels or it’s internal parts must move when the model is held up to a light source.

**A Radio Controlled Car model** is a model that starts with a commercial RC model under $25. 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.

**A Free-Form entry** is not required to move, but students may elect to include that element to their design. Free Form entries are allowed to use stored mechanical energy (like a wind-up gizmo), but MAY NOT USE batteries or electrical power from a wall socket.

**An entry to the Habitation category** blends both science and literacy. It encourages students to design and construct a model of a Mars Community, all the while having students reflect on what life would be like on Mars and create short stories.

**Habitat: Use the following link to read the rules and guidelines for entering a Habitat:**

[**https://uh.edu/honors/Programs-Minors/co-curricular-programs/data-and-community-health/community-health-worker-initiative/stem---mars-habitation/rules-and-guidelines/**](https://uh.edu/honors/Programs-Minors/co-curricular-programs/data-and-community-health/community-health-worker-initiative/stem---mars-habitation/rules-and-guidelines/)

A complete entry will consist of:

* + A model of Martian surface rover or habitation:
		- Physical models
		- Trifold presentation boards
	+ A “guide” booklet describing the mission and the model using the forms provided on the Mars Rover website.
	+ A team effort plan documenting each member’s contribution
	+ Receipts documenting expense
	+ A presentation/skit (less than 5 minutes).