

BUILD YOUR OWN MARS ROVER

MATERIALS

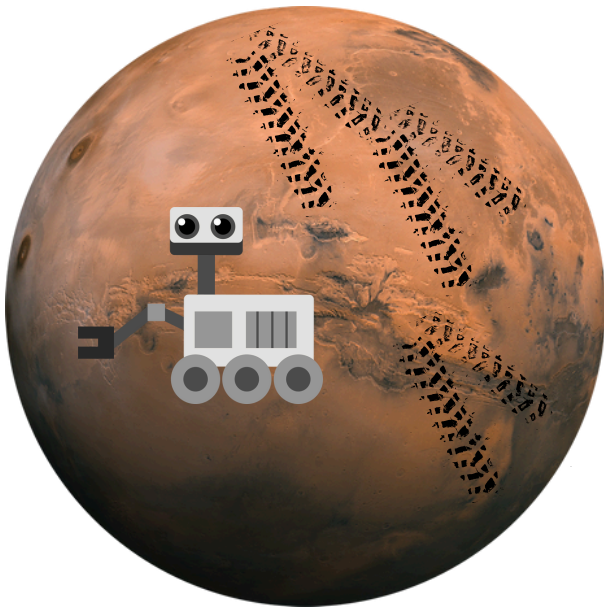
- Cardboard, plastic straws, paper cups, bottle caps (for wheels).
- Rubber bands, tape, glue, and scissors.
- Small motor and battery (optional for advanced builds).
- Sand, pebbles, and dirt to simulate Mars terrain.

INSTRUCTIONS

1. Introduce students to Mars rovers, such as Perseverance and Curiosity.
2. Divide students into teams and provide them with the materials.
3. Challenge teams to design and build a rover that can move across simulated Martian terrain.
4. Test the rovers by having them navigate a "Mars" obstacle course.
5. Discuss what worked, what didn't, and how their designs could improve.

TIPS FOR THE EDUCATOR

- Show videos or images of actual Mars rovers for inspiration.
- Encourage iterative design, where students improve their rover after testing.



DESCRIPTION

Students design and build a model Mars rover using household materials. They then test its ability to navigate rough terrain, mimicking conditions on Mars.

OBJECTIVES

- Understand the challenges of designing robotic explorers for planetary surfaces.
- Learn about Mars' environment and surface conditions.
- Develop problem-solving and teamwork skills.

