

# STEM Project-Based Learning Activities

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**Interactive STEM activities fostering critical thinking, teamwork, and hands-on learning.**

## **Eco Engineers: Build a Recycling Robot (Grades K–5)**

Students design and build a robot model to promote recycling.

1. Discuss recycling and sorting.
2. Design robot models.
3. Build models from recycled materials.
4. Present robots and their features.

## **Roller Coaster Challenge (Grades 6–8)**

Students build miniature roller coasters to explore physics concepts.

1. Discuss basic physics (gravity, momentum).
2. Design roller coasters with simple materials.
3. Test and refine designs.
4. Share and discuss results.

## **Mission Mars: Space Habitat Design (Grades 9–12)**

Students design habitats suitable for life on Mars.

1. Research Mars living challenges.
2. Design habitat models.
3. Present designs with detailed explanations.
4. Debate their practicality.