Chemical Reaction Vehicle

STEM Project

Engineering Design Challenge

Use your knowledge of science to help design and build a vehicle that is powered solely by a chemical reaction.

Criteria

- Vehicle must travel a distance of 1 meter

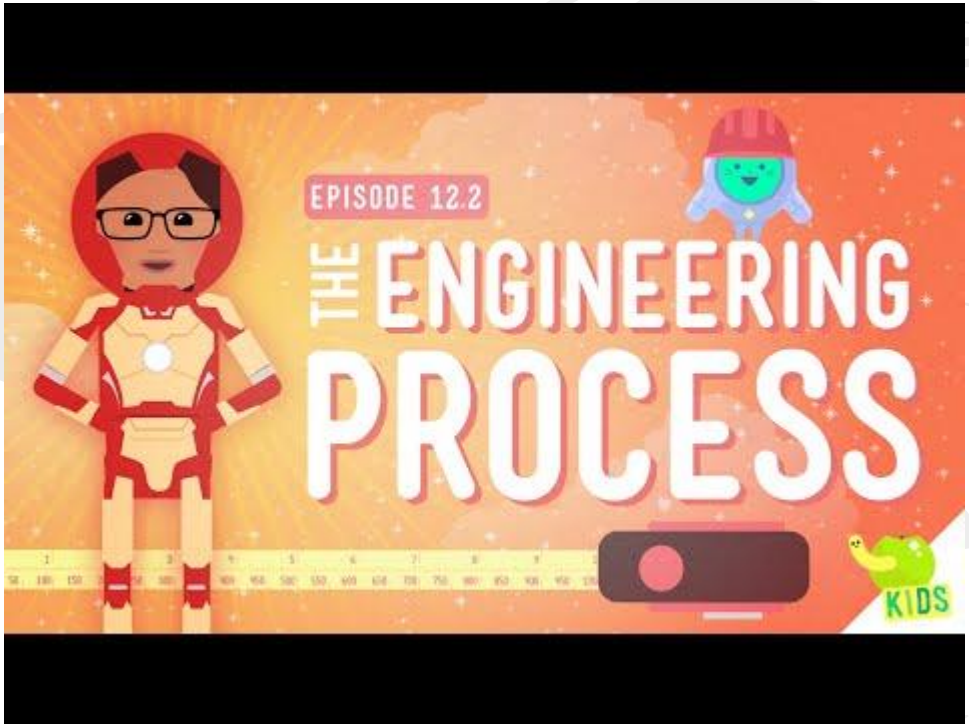
Constraints

- Vehicle must not exceed 30 cm in length
- Vehicle must be constructed using available materials (no toy cars)
- Chemical reaction must occur from combining substances and water available in your classroom
- Once the chamber for the reaction is chosen, no changes can be made to that part of the design.

Engineering Design Process

Follow the Engineering Design Process and document your work in your notebook. *(See the checklist for guidelines.)*

Engineering Design



Notebook Set-Up

Table of Contents: Chemical Reaction Vehicle Part 1

- Question: What combination of substances will create the best chemical reaction in a given chamber?
- Data Collection
  - change only one variable at a time
  - record observations and/or any measurements
- Claim
- Evidence
- Reasoning

Notebook Set-Up

Table of Contents: Chemical Reaction Vehicle Part 2

Notebook Page Headings

- Ask
- Imagine
- Plan
- Create
- Improve

Glue in Chemical Reaction Vehicle Checklist