

Prepare your students for the Science Alive! **STEM DAY OUT Mousetrap Racers Challenge** and build and test your Mousetrap Racers before the big race on the Science Alive! Racetrack.

### At school activity

The purpose of this activity is for students to build and test their mousetrap racer prior to attending the Science Alive! STEM Day Out. Students should have the opportunity to build their racer using base model instructions which then can evolve through the process.

### Objectives:

- Utilise design and engineering process
- Encourage creativity, critical thinking and problem solving
- Learn about kinetic and potential energy
- Apply science inquiry skills
- Innovate (design, build and evolve your own unique vehicle).

### What you will need:

- Cardboard
- Bamboo skewers
- Wooden snap-back mousetrap
- String
- Straw

### Teacher materials:

#### Online video

<https://www.youtube.com/watch?v=XZ-u2872c4>

#### Images



### Curriculum Links:

#### Science

#### Science Understanding - Year 8 Physical sciences

Energy appears in different forms, including movement (kinetic energy), heat and potential energy, and energy transformations and transfers cause change within systems.

#### Science Inquiry Skills - Years 7-9

- Planning and conducting
- Processing and analysing data and information
- Evaluating
- Communicating

#### Design and Technologies

#### Processes and Production Skills - Years 7-9