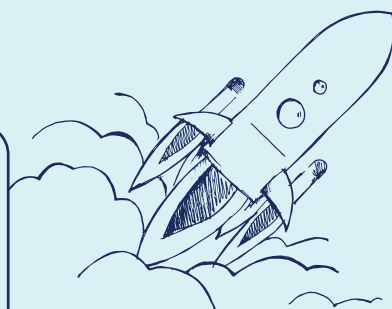




Wonder
Project

Rocket launch off

How to build your rocket



Create a supercharged water rocket that flies better than the rest to be in to win some epic prizes... and bragging rights.

**Kei te rite koutou?
Let's go!**

You'll need:

- 2 x 1.5L soda bottles
- Recyclable materials for your fins
- Scissors
- A hot glue gun or strong tape
- Decorations
- Bluetack or a small coin

Think like a STEM superstar

Get an edge on the competition by considering these aerodynamic design variables before you start your creation:

- Rocket body
- Nosecone
- Weight distribution
- Fin shape, size and number

Aerodynamics is the study of how air moves around an object. A rocket's aerodynamics affects how it flies.

Step 1

Create your rocket fins by drawing them onto your chosen recyclable material. Then, cut them out.

Step 2

Make your fins your own with decorations.

Step 3

Stick your fins around the top of a 1.5L soda bottle with hot glue or sturdy tape. This will become the bottom of your rocket.

Step 5

Optionally, you can add a payload to your nosecone by screwing some bluetack or a small coin into the cap.

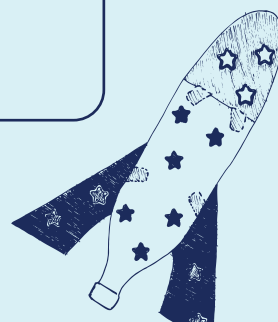
A payload is the object or entity carried by a rocket's nosecone. In water rockets, a payload could help with the rocket's weight distribution.

Step 4

Create your nosecone by cutting the top off another 1.5L soda bottle, around 10cm below the cap or just above the label.

Step 6

Place your nosecone onto the top of your rocket. Do not attach the nosecone with any adhesives – the air pressure from launch will hold it in place.



Ka pai!

**Your rocket is ready
for blast off.**

Check with event organisers for your rocket launch time slot.