

# THE WONDERSTRUCK ROCKET CAR WORKSHOP

AGE SUITABILITY: KS1 TO ADULT

UP TO 150 PARTICIPANTS

## THE TASK

Pupils work in teams of three to build a prototype model Rocket Car. Rocket Cars are small cars powered by horizontally mounted water rockets.

Teams test the prototype to establish a benchmark performance and can then investigate how altering the size of the bottle, volume of water, pressurisation, nozzle diameter and type of wheels affect its performance. The session ends with a competition to find the 'best' Rocket Car.



## WORKSHOP FORMATS

We can deliver this workshop in an hour to small class-sized groups.

We can run this workshop with up to 150 participants but this will depend on the spaces you have available for racing and testing.

## WORKSHOP REQUIREMENTS

To run the workshop we need a space suitable for the number of participants to undertake a practical activity. For larger groups we will usually split into a number of separate classrooms for the Rocket Car construction. We will need access to a large space with a smooth, flat floor for the introductory presentation and a large, flat outdoor space (tennis court size or bigger) with a concrete or tarmac surface for the final competition.

## THE SCIENCE

The main STEM topics covered in this workshop are:

- Forces
- Pressure
- Friction
- Momentum (older/more able groups)

This workshop also covers aspects of experimental data collection and processing (taking multiple readings, averaging, fair tests etc) and more holistic skills such as team working, communication, investigation etc.



## CONTACT US

If you've got a question or would like to make a booking you can contact us on:

T: 0845 5193 325

E: [enquiries@wonderstruck.co.uk](mailto:enquiries@wonderstruck.co.uk)

 [FACEBOOK.COM/WONDERSTRUCKWOW](https://www.facebook.com/wonderstruckwow)

 [YOUTUBE.COM/WONDERSTRUCKWOW](https://www.youtube.com/wonderstruckwow)

