THE WONDERSTRUCK

DRUMBOT WORKSHOP

AGE SUITABILITY: KS2 TO ADULT

THE TASK

Pupils work in teams of three to build a prototype model DrumBot.

DrumBots are small 'robots' that move by using a geared motor to lift a weight mounted on an arm, which changes their centre of gravity and causes them to roll forward.

Teams test the prototype to establish a benchmark performance and can then investigate how altering the size of the weight, length of the arm, power of the motor and diameter of the drum affect it's performance.

UP TO 150 PARTICIPANTS

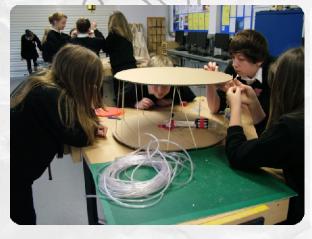


WORKSHOP FORMATS

We can currently deliver this workshop in a 2 hour session for groups of up to 120.

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 DrumBot construction. We will need access to a large space with a smooth, flat floor for the introductory presentation and also for the final competition. If weather permits, the final race off and time trials can be held outdoors.



THE SCIENCE

The main STEM topics covered in this workshop are:

- Forces
- Centre of gravity/mass
- Moments & torque
- Simple circuits

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, practical building and 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
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