

The Wonderstruck...

DrumBot Workshop

What happens?

Pupils work in teams of three to build a DrumBot. They test the prototype and then are given access to a wide range of different components with which to improve the performance of their DrumBot.

Who's it for?

KS2 all the way to adult!

How many can take part?

We can run this with up to 150 participants.

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 can be held outdoors.



WONDERSTRUCK
SCIENCE ON FIRE



'A quite original way to look at moments and torque!'

Ks3 Science Teacher

Workshop format

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

Teams investigate how altering the size of the weight, length of the arm, motor power & diameter of the drum affect performance.

We often present the DrumBot workshop in combination with our 'Solar System Explorer' contextualisation material which sets the scene by looking at the use of robot probes to explore other planets.

The session ends with a race-off competition to find the 'best' DrumBot.

The science

The STEM topics covered in this workshop are:

- Forces
- Simple circuits
- Torque & moments (for older participants)

We can differentiate content for participants from KS2 to adult!

Duration

Exact workshop duration depends on the particular format and number of participants. We can run this workshop in its basic form in an hour with 30 - 60 participants or two hours with 150 participants.



'I've never seen anything move like that.'

Who'd have thought moments would ever be useful!'

KS3 Student

www.wonderstruck.co.uk

T: 0845 5193 325

E: enquiries@wonderstruck.co.uk



facebook.com/wonderstruckwow



youtube.com/wonderstruckwow

Wonderstruck Ltd. Brandize Hill Farm, Petrockstowe, Devon. EX20 3HW.
Registered in England 657 7857 | VAT Registration Number 883 3214 22