MCS Projects Ltd
Raising Aspirations

The North London Science and Technology Challenge Day - *for Gifted and Talented Year 8 and Year 9s*

What are the Science & Technology Days for?

They raise enthusiasm for STEM subjects and encourage young people to consider studying them further.

In 2018, MCS Projects Ltd organised 30 Challenge Days across the UK, involving 198 schools.

What happens?

12 Gifted and Talented Year 8/9s are invited to participate from each school. Working together in mixed school teams of four, they undertake practical activities that increase their awareness of the application of science.

Each activity lasts 75 minutes and is designed to develop workshop skills such as planning and team work.

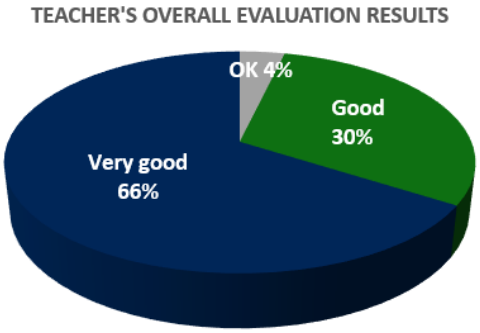
Challenge Days are held on the campus of a local college or university. The local Mayor or Deputy Lieutenant is invited to present awards to members of each winning team.

How are they rated?

Evaluations of last year's events indicated that:

96% of the teachers and 86% of the young people considered their Challenge Day to have been 'good' or 'very good'.

The overall winning teams from each Challenge Day progress to one of our regional Finals. In 2018, the Finals were hosted by the Universities of Manchester, Sheffield and Queen Mary's University of London.



2018 Results

Additionally, 79.5% young people stated that they were more likely to study STEM subjects at College/University as a result of the event.

Importance of STEM events

The U.K currently faces a shortage of skilled engineers. A 2017 report by Engineering UK on the State of Engineering estimated that there is an annual shortage of 20,000 skilled engineers.

The Robotics Challenge

Each team is provided with the latest Lego Mindstorm EV3 robot, which they programme in order to navigate around a course. Each robot is equipped with ultrasonic and infrared sensors.

The E-FIT Challenge

Having witnessed a simulated crime, each team uses the latest E-FIT 6 facial recognition software (as used by 90% of UK police forces) to create a computer image of the thief. They also consider problems associated with memory and facial recognition

The Vehicle Challenge

Each team designs and constructs a simple battery powered vehicle from kit pieces, considering power transmission, speed and torque. Each team's vehicle is timed between starting and finishing lines.

The Medical Diagnostics Challenge

Each team undertakes the role of a doctor, diagnosing conditions suffered by simulated patients. They test 'urine' samples, evaluate brain function, examine X-rays and brain scans. They consider how the brain works, seeing equipment operated directly by the brain.

I am interested, how do I book?

The North London Science & Technology Challenge Day will be taking place at **The College of Haringey, Enfield and North East London – CONEL on Tuesday 2nd July.** It will begin at 9.30am and finish at 3pm.

The cost for a school to enter twelve young people is **£366 + VAT**. Costs can be adjusted pro-rata. Places are allocated on a first come first served basis.

To reserve a place for your school please email John Waterworth to confirm your intentions.

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