

Sentinus STEM Roadshows & Workshops for Schools

Science, Technology and Maths
Activities to Support the Curriculum

Primary STEM Roadshow for 9-11 Year Olds (Full Day)

These full day Roadshows support learning in science, technology and maths at Key Stage 2 by engaging up to 65 pupils in a series of STEM based problem solving challenges, supported by trained sixth form mentors. Hosted by a local post primary school, the programme is designed to raise awareness of science and technology and enthuse and inspire the pupils in the subjects. Through participation in the practical activities pupils enhance their knowledge of science, technology and maths, develop team working, time management, creative thinking and presentation skills.



Primary Robotics Roadshow for 9-11 Year Olds (Full Day)

This is a practical programme giving Key Stage 2 pupils the opportunity to learn basic programming skills and write and test their own programmes to control autonomous robots within the context of space exploration. Working in pairs, the pupils are guided through a series of programming activities and have the opportunity to see their own robots carry out specific tasks. Up to 50 pupils can be involved in each programme.



Big Bug Hunt Workshops for 5-11 Year Olds (2 Hours)



This is a two hour workshop to engage primary pupils in practical science activity, enhance learning and develop skills. Pupils carry out surveys of invertebrates in a range of habitats which can include grass, flowerbeds, hedgerows, leaf litter, ponds and many more. The Big Bug Workshop is a great way to put children in touch with their environment, engage them in fun science and develop their scientific skills.

Primary KeyQuest Roadshow for 9-11 Year Olds (Full Day)

This is full day of practical maths activity for up to 65 P6/7 pupils based around the theme of Dungeons & Dragons. Working in teams of three, supported by trained sixth form mentors, the children have to solve ten mathematical problems in search of a fabled jewel. The programme is hosted by a local post primary school and helps develop team working, time management and creative thinking skills.

Secondary STEM Roadshow for 11-14 Year Olds (Full Day)

This full day Roadshow is designed to raise awareness of science and technology and enthuse and inspire the pupils in the subjects. This programme supports learning in science, technology and maths at Key Stage 3 by engaging up to 65 pupils in a series of STEM based problem solving challenges, supported by trained sixth form mentors. Through participation in the practical activities pupils enhance their knowledge of science, technology and maths, develop team working, time management, creative thinking and presentation skills, while the Sixth form mentors have the opportunity to develop leadership skills.

Science, Technology & Maths Roadshows and Workshops for Schools

These roadshows and workshops have been developed by Sentinus to promote Science, Technology, Engineering & Maths (STEM) in primary and post primary schools. The activities enhance and enrich learning in the subjects and offer opportunities for people of all ages to develop skills and capabilities as identified in the revised curriculum for Northern Ireland.

Innovation Workshops for 14-18 Year Olds (1 1/2 Hours)

In this workshop pupils play a board game which demonstrates the process of developing a product and getting it to the market place. They are then introduced to new or developing technologies and given the opportunity to design products for the future. There are no limitations on their designs as the products do not have to be manufactured. This process helps develop oral and written communication skills, creative thinking and presentation skills. The workshop can accommodate up to 60 people and can be run three or four times per day.

Primary Fun Maths Roadshow for 9-11 Year Olds (1 1/4 Hours)

This Fun Maths Roadshow has been developed to show young people that maths is relevant and can be a lot of fun. Working in pairs the pupils tackle a series of fifty or more maths puzzles to see who can complete the most within a fixed time. They will thoroughly enjoy the brain teasers they encounter and the competitive element of this event. The activity can be used with groups of up to 80 at a time and Sentinus will run three sessions in a day.



Secondary Fun Maths Roadshow for 11-14 Year Olds (1 1/4 Hours)

This Fun Maths Roadshow has been developed to show young people that maths is relevant and can be a lot of fun. Working in pairs the pupils tackle a series of fifty or more maths puzzles to see who can complete the most within a fixed time. They will thoroughly enjoy the brain teasers they encounter and the competitive element of this event. The activity can be used with groups of up to 80 at a time and Sentinus will run three sessions in a day.



Secondary Robotics Roadshow for 11-14 Year Olds (Full Day)

This is a practical programme giving Key Stage 3 pupils the opportunity to learn basic programming skills and write and test their own programmes to control autonomous robots within the context of space exploration. Working in pairs, the pupils are guided through a series of programming activities and have the opportunity to see their own robots carry out specific tasks. Up to 50 pupils, supported by trained sixth form mentors, can be involved in each programme.



K'Nex Workshops for 7-11 Year Olds (1 1/2 Hours)



These workshops engage children, working in pairs, in 'design and build' problem solving challenges using the popular K'Nex construction kits. The activities promote creative thinking, problem solving and the development of communication skills in a fun way. We will run three or four workshops per day.

Leadership Workshops for 16-18 Year Olds (1 1/2 Hours)

Sentinus has developed these activities to promote team work and leadership. Participants are asked to work in teams to solve a range of science and engineering based problems. Communication, team working and leadership skills are essential to complete the challenges. Sentinus can run three of four workshops per day and each can accommodate up to 65 people.

STEM Workshops for 10-14 Year Olds (1 1/4 Hours)

Launch your own paper rocket, build a hovercraft or an air powered car. These, and a range of other, STEM activities are designed to enthuse and inspire young people in the areas of science and technology. These 'design and build' activities can be used to promote understanding of the subjects, enhance and enrich learning and support the development of team working and communication skills. Up to 65 people can take part in each workshop and Sentinus will run three or four in a day.

