

STEM news

Science, Technology, Engineering and Maths Enhancement and Enrichment (STEM E&E) in schools across Bristol, Bath and Somerset. Brought to you by Graphic Science, your local STEM Ambassadors management contract holder!

spotlight on
STEM

STEM Role Models

Who do your students look up to as role models? If you are looking for a way to shift their focus from celebrities on to more local, inspiring people from the world of science and engineering, we can help.

Graphic Science is the local contract holder for the national STEM Ambassadors programme. STEM Ambassadors are scientists, technologists, engineers or mathematicians, who volunteer their time to go into schools. The aim of an ambassador visit is to give students an understanding of how STEM subjects are used in the real world, providing a link between the curriculum and future careers, whilst also exposing students to inspiring role models.

“I was inspired to become an engineer by a visit to my school when I was younger. I now want to highlight careers in engineering to future generations.”

Adam Williams, STEM Ambassador

Ambassador visits are free and provide a fresh perspective in curriculum studies; highlighting the importance and potential applications of STEM subjects. The BTEC applied science students at Downend School recently had a visit from two Magnox engineers. The ambassadors supported the lesson by linking the curriculum to the health and safety issues they encounter working at a power station. Feedback from both the students and teacher was very positive.



“The Magnox ambassadors were outstanding”

Science Teacher, Downend School

STEM Ambassadors can draw upon their real-world experience to provide brilliant examples of where studying STEM subjects can take you. Speaking to ambassadors with unusual, cross-disciplinary or exciting jobs can really motivate the students and broaden their horizons. St Brendan’s Sixth Form College

are holding monthly STEM lunches for female students and ambassadors, giving students the opportunity to chat to ambassadors of different ages and expertise.

“Sending ambassadors with exciting careers back into their old school really raises the aspirations of the students”

Claire, STEM Manager, Graphic Science

Curriculum and career related activities are just two of the many ways ambassadors support local schools. To discuss how STEM Ambassadors can be role models for your students please get in with us at Graphic Science.

**MEET THE
Ambassador**

Names: **Helen and Rebecca**
Company: **ARKive** - Online catalogue of endangered species
Job: **Media Researchers**
Qualifications: A Levels- **Biology, English Literature, PE, Geography, Economics, Art**
University- **BSc in Biological Science**
Quirky fact from your field: **The blue whale’s tongue can weigh as much as an elephant!**



Name: **Mark Organ**
Company: **GE Oil & Gas**
Job: **Hydro-Mechanical Engineer**
Qualifications: A Levels- **Physics, Maths, Business Studies**
University- **MEng in Aerospace Engineering**
Quirky fact from your field: **You could fit 18.7 million billion billion billion billion billion table-tennis balls in a cubic light-year!**





Maths Networking Event

Tuesday 29th November, 16.00-18.00
Fairfield High School

Teachers and ambassadors are invited to discuss how visits from STEM ambassadors can benefit maths in schools.

We will cover curriculum support, STEM clubs, enrichment activities and careers. We can also work with you to develop maths workshops and organise future ambassador school visits.

Email katy@graphicscience.co.uk for more info or to confirm attendance.

Opportunities & Resources

What is coming
up?

The Big Bang Fair 2012

www.thebigbangfair.co.uk

Did you know you can take your students to this young scientists' and engineers' fair for free?

The Big Bang Fair will be taking place **15 - 17 March 2012** at the NEC, Birmingham. Students will have the opportunity to explore interactive demos, be part of inspiring theatre shows or participate in hands-on workshops.

If your school has a club that would be interested in showcasing at this event, check out the website.

- club.thebigbangfair.co.uk/club_nominations.cfm

STEM Challenge 8

The eighth olympics inspired STEM project- **The Deloitte Parasport Challenge** - is now live.

Participation is free and gives KS3 students the opportunity to research their local Paralympic sport facilities and make recommendations to increase this both within their school and the community.

Teams compete against other local schools for the chance to be in the challenge final, held in London in January.

The deadline for team entries is 25/11/11.

For more information visit - www.stemchallenges.net

Bloodhound Education Centre

The Bloodhound engineering mission is to build a car to break the land speed record.

A new Bloodhound Education Centre has recently opened in Bedminster, Bristol. School groups can visit the centre for free and take part in engineering activities.

Visit www.bloodhoundssc.com or contact steve.lewis@bloodhoundssc.com for more information.

Maths Inspiration Event

27th March, 13.00-15.45, Bristol Hippodrome

If your school has never been to one of the Maths Inspiration events, this year you could take **20 students for free!**

Aimed at Years 11/12, the afternoon features talks from three popular and engaging maths speakers, with previous events notably increasing students' aspirations and motivation.

For more information visit www.mathsinspiration.com or book via mail@mathsinspiration.com

Earthquake and Volcano Workshops

Alongside the success of the Bristol Dinosaur school workshops, the School of Earth Sciences at the University of Bristol is offering two new workshops on earthquakes and volcanoes.

These interactive sessions for KS2/3 students can be delivered in your school free of charge. They explore why earthquakes or volcanoes occur and how they affect society.

Please contact Learning Officer Ed Drewitt for more information - ed.drewitt@bristol.co.uk.

Salters' Festivals of Chemistry 2012

Schools can enter teams of four students from Years 7/8 for these very popular day-long events which take place at Bath and Bristol university labs.

The festival days will include hands-on practical chemistry challenges, chemical demonstrations, prizes and certificates.

The website goes live 28th November with dates and details of how to enter teams - www.salters.co.uk/festivals

Invigorate - Educational Resources

invigorate.royalsociety.org

The Royal Society has created this website of curriculum-linked science teaching resources for Key Stages 2, 3, 4 and 5.

There are activities for in and outside the classroom, including interactive quizzes, debates and practical experiments. Topics span weather, classification, electricity, magnetism and organisms.