

## 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

**W**ho 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. Robert Blake Science College recently had a visit from an electrical and electronic engineer. The ambassador spoke to year 11 applied science students about health and safety in the engineering industry, relating this to the curriculum. After positive feedback from the students, we are now arranging for an ambassador from another field to visit the school next term.

**“A number of students are now interested in the engineering industry”**

-Science Teacher,  
Robert Blake Science College

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. A number of ambassadors have recently visited Richard Huish College, providing students with a real life understanding of a career in science or engineering.

**“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!**





## Opportunities & Resources

What is coming  
up?

## The Somerset Christmas Lecture Spectacular Science for KS3

7th December, 10.00-12.00, Taunton Racecourse

Journey to the limits of space and time before  
discovering all the science of the circus!

Tickets are free and can be booked on 01242 775891  
or via [education@cheltenhamfestivals.com](mailto:education@cheltenhamfestivals.com)

## The Big Bang Fair 2012

[www.thebigbangfair.co.uk](http://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](http://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](http://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](http://www.bloodhoundssc.com) or contact [steve.lewis@bloodhoundssc.com](mailto: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](http://www.mathsinspiration.com)  
or book via [mail@mathsinspiration.com](mailto: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](mailto: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](http://www.salters.co.uk/festivals)

## Invigorate - Educational Resources

[invigorate.royalsociety.org](http://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.

