

STEM news

Science, Technology, Engineering and Maths Enhancement and Enrichment (STEM E&E) in schools across Gloucestershire. 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. At the science careers fair at Katherine Lady Berkeley's School last month, pupils in years 11-13 enjoyed the opportunity to discuss career pathways and job roles with nine STEM ambassadors from a variety of STEM fields, with feedback from all involved being very positive.

"Students and ambassadors had a fabulous day, with many appreciative students and very tired ambassadors by the end!"

Teacher, Phillip Pashford
Katherine Lady Berkeley's 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. Cirencester College are running a series of lunch time talks to do exactly this, giving students the opportunity to chat to ambassadors from healthcare, engineering and research fields.

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

Anne, 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: **Marianne Morris**
Company: **Magnox**
Job: **Nuclear engineer**
Qualifications: A Levels-Physics, Maths Biology
University- **MSc Physics & Astrophysics**
Activity: **The newly designed Magnox game! Small groups of students take turns to roll the die and move around the energy themed board to win!**



Name: **Alexandra Gleed**
Company: **GE Healthcare**
Job: **QC Analyst**
Qualifications: A Levels-Biology, Chemistry, Maths and Law.
University- **BSc Biochemistry**
Activity: **I'm a new ambassador**



and really excited to go into some schools and speak to students about my experience in STEM subjects - at school, university and working life!

STEM Ambassador & Teacher Network Meeting

Wednesday 7th December, 4-6pm, Chosen Hill School

Come along for the opportunity to network with STEM teachers and ambassadors to develop and explore STEM activities for your school.

We will discuss curriculum support, STEM clubs, enrichment activities and careers support.

Mince pies for everyone! I hope to see you there.

Email anne@graphicscience.co.uk for more info and 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.

The Gloucestershire Christmas Lecture

Wednesday 14th December, 2011
10am and 1pm
University of Gloucestershire

Spectacular Science for KS3

Students will experience a one-off science extravaganza with two Cheltenham Science Festival favourites, who are sure to make the event go with a bang!

30 free places per school - To book call 01242 775891 or email education@cheltenhamfestivals.com

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.

STEM Clubs

Support from the Royal Academy of Engineering

Would you like access to CPD and resources to help with setting up a STEM club?

Contact Claudia Clarke at the Cotswold school
cclarke@mail.cotswold.gloucs.sch.uk

