

**Welcome** to our Third edition! As we come to the end of the academic year some of our projects are coming to a close but there are still plenty of activities happening! As I am writing this we are about to be one of the first schools allowed access to the MOD at Abbeywood. We are privileged to be one of five local secondary schools taking students on site as part of, what is usually, 'Families Day'. We are also fortunate to have 2 events in the last week of term that have been kindly organised for school as part of Thornbury Science Festival (July 9<sup>th</sup> – 18<sup>th</sup>): A Lego Robotics Workshop for Year 9 and 10 students and a Jungle Roadshow for Year 8. *For more information on all the other fabulous Thornbury Science Festival events going on visit: <http://www.mythornbury.co.uk/thornbury/thornbury-science-festival>*

Here is a summary of the activities/events/trips/visits/workshops etc.. that have been on offer to students this year.

<b>STEM OPPORTUNITIES 2014 - 2015</b>					
<b>Year 7</b>	<b>Year 8</b>	<b>Year 9</b>	<b>Year 10</b>	<b>Year 11</b>	<b>Year 12+</b>
RAF / BAE Systems	RAF / BAE Systems	Go-Kart Project	ECITB	Maths Inspiration Lectures	Maths Inspiration Lectures
Bloodhound Experience	UK Maths Trust Challenges	UK Maths Trust Challenges	UK Maths Trust Challenges	UK Maths Trust Challenges	UK Maths Trust Challenges
Babcock Engineering	Bloodhound Experience	Telescope Project	Fun Maths Roadshow	Royal President of Engineering talk	Summer Work Experience
Computing Club	Babcock Engineering	FESTOMANE	FESTOMANE	FESTOMANE	University Taster days
Science Club	TEENTECH	EDT - Go4Set	EDT - Routes into STEM	EDT - Routes into STEM	Women in Engineering
Maths Enrichment	Flying Start Challenge	GKN Visit	FMSP - University- taster days		STEM Café
British Science Week	Computing Club	Computing Club	Computing Club		
MOD Abbeywood	Science Club	Your Green Future	Maths Feast		
Science Museum	Maths Enrichment	Science Made Simple			
	British Science Week	British Science Week			
	AIRBUS - Go4Set	Tomorrow's Engineers			
	Cheltenham Science Festival	GE Oil and Gas			
	Jungle Roadshow	LEGO Robotics			
	MOD Abbeywood	Renbuggy Project			
	Science Museum	Science Museum			

**KEY:**

Whole Year Presentation

Ongoing School STEM Club run by Castle Staff

STEM Projects with Industry Mentors

Competitive STEM Projects with Industry Mentors

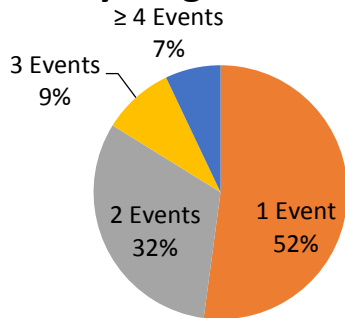
Competitions

Optional Educational Visit

Workshops in school run by STEM Professionals

Events/courses advertised by school but organised by students independently

## Number of STEM Events that Key Stage 3 attended



### Another way to look at this data is:

100% of our KS3 students attended at least one STEM event.

48% of our KS3 students attended at least two STEM events.

16% of our KS3 students attended at least three STEM events.

**The record of most events attended goes to Elissa Colwill Year 8 with 8 STEM events!!**

**Your Green Future 20th May** – organised by Severn Wye Energy Agency. Schools from across Bristol came together for a series of workshops run by local businesses to consider careers in a Green Future. The students got to design and build a model of a Green City, solve waste disposal problems for UBHT, The Mall and Glastonbury Festival as well as spending £1,000,000 on the most deserving ‘Green’ project of the future!



*“Good Debates were had”. “I learnt about food waste. **It has to be sorted**”. “I gained confidence in speaking in front of people”. “I learnt about lots of different ways to reduce emissions and how people can help”. “Co-operation is very necessary within businesses. Many businesses, particularly architecture, need to consider the environment in their work”. “It was fun!”*

**Tomorrow’s Engineers (Sponsored by AIRBUS) 22 May** – After a whole year group presentation to Year 9, approx. 90 students took part in 3 different hands on Engineering workshops.



**MOD 10<sup>th</sup> July.** Students were escorted around site by apprentices and graduates, saw so many different careers and were given so many different challenges..... including a simulation of parachuting!!

Thanks to **STEMworks** and Thornbury Science Festival for the exciting and challenging Lego Robotics workshop.



Thanks also to Ross from **Atkins** who spoke at our STEM Café at the 6<sup>th</sup> form – not only about his career in Mechanical Engineering but how/where to apply to Uni and what to look for in a course.



As you can see we have been able to offer so much to the students this year, thanks to the support of Governors, Senior Management, Staff, Parents, Premium Partners and local STEM Companies. Do you want to run a workshop or speak to our students? Have an idea/ event/ trip you want to run? Help with the STEM Café? (Good for UCAS). For questions about the above or anything to do with STEM at all please contact: **Mrs Beddoes** at [rachel.beddoes@thecastleschool.org.uk](mailto:rachel.beddoes@thecastleschool.org.uk)