

# Science and Maths Low Down



## Welcome to the second edition of the Science and Maths Low Down

Work on the science and mathematics specialism continues to develop. The second major specialism event, "Science and Maths weren't like that in my day!" was a great success and you can find out more about what participants got up to over the page. Work on EcoSchool status has also been quickly rewarded, with the school achieving the bronze award. Miss Matthews is now working hard, along with a team of students and staff, to ensure we achieve the silver award soon.

We have been particularly busy this term organising our next major science and maths specialism event – a science, technology, engineering and maths (STEM) careers day (see details below). In addition, the science department are excited about an international project being set up with Year 7 students in which they will compare information on renewable energy resources with an international school – a great way to link our languages and science specialisms.



Science



The revamped wildlife area (above) and a 'bug hotel' (below) – work completed by the EcoSchool team



## Are you interested in a career in Science, Technology, Engineering or Maths? Or do you know someone who is?

Find out more at the **STEM Careers Day**  
Wednesday 14<sup>th</sup> July 2-7pm

The next major specialism event is scheduled to take place on **Wednesday 14<sup>th</sup> July** from **2-7pm**. Parents, students and members of the local community are invited to find out more about careers in science, technology, engineering and maths (STEM) at our careers day. Representatives of local STEM companies (including AWE, Rutherford Appleton Laboratories, BP Castrol, Diamond Light Source, Vodafone and the Institute of Animal Health, amongst others) will be available to answer any questions you may have about the work they do and the route they took into their career. There will also be a series of short talks on different STEM careers that you can opt into.

Whether you are a parent of a student who is considering a STEM career, considering a career change yourself or simply want to find out a little more about our local STEM industries, please take the opportunity to drop in and wander round the stalls that will be set out. This event is open to all so please feel free to call in at any time between 2 and 7pm, even if you are not connected to the school. The event will take place immediately before the Year 12 Higher Education evening, so we would particularly encourage Year 12 students and parents to take advantage of this opportunity to enquire about STEM careers.



*Science and Maths  
weren't like that in  
my day!*

Parents had the chance to revisit their school days at the "Science and Maths weren't like that in my day!" event in February. Following on from the successful Space Day, the evening was the second in a series of events run as part of the Science and Mathematics second specialism. In a short presentation, Miss Sutlieff and Miss Donne explained the recent changes to the Science and Mathematics curricula, whilst Miss Gaster put participants' Science knowledge to the test by asking them to answer 'O' Level exam questions from 1957 and then compared the responses required to those needed for the new GCSE exams. The greater emphasis on analysis and interpretation of data rather than recall of facts became obvious very quickly.



Students during a Science lesson

Parents then had the chance to experience first hand the type of activities that their children carry out in Science and Mathematics lessons at The Downs through a choice of interesting, informative and fun workshops. Some parents chose to examine evidence for the theory of evolution, creating an evolution timeline and taking part in a practical demonstration of survival of the fittest using dog biscuits and cat litter! Others looked at the way investigative skills are now taught at GCSE by planning and carrying out their own investigation into the strength of plastic bags. Meanwhile, a heated debate on whether alien life exists in space was taking place and competition was fierce to see whether it was possible to win the million on a mathematical version of "Who wants to be a millionaire."

Feedback from the evening was very positive with parents enjoying the chance to see the changes in Science and Mathematics curricula and teaching methods in recent years. Here are some of the comments from participants:

*"I really didn't think anyone would enable me to enjoy maths and I did enjoy this workshop"*

*"Very useful and informative"*

*"This was a very well done, worthwhile evening. I would definitely do this again and recommend it to others."*

If you missed out on this event, why not join us for our STEM careers evening on **Wed 14<sup>th</sup> July** – for more details see overleaf.