



Science Newsletter –April 2008 Edition

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Upcoming Events

Friday 16th May 2008; 'The Big Bug Hunt' for primary schools will take place in Creggan Country Park.

Smallpiece Trust Residential



Mrs Gill and five year 11 pupils took part in The Materials Technology Smallpiece Trust residential at Oxford University from Monday 31st March to Thursday 3rd April 2008.

The Smallpiece Trust is an independent charity providing exciting programmes to promote engineering careers to young people.

The course gave pupils the chance to discover how materials science not only influences every aspect of engineering, but how it affects life itself. It gave pupils the chance to discover the rich and varied world of materials science. Students had a very packed and varied itinerary. They stayed in the student accommodation at St Hilda's College and the food was fantastic. They did not have to wash a dish!

After breakfast on the first day, the organisers set students to design a device (to be made out of materials such as cane, wood and string), that would be able to distinguish between the mass of three bags of rice. Students were very enthusiastic and they got to know other pupils as they had to work effectively in teams. The evening was spent on a walking tour of the centre of city of Oxford and afterwards they relaxed to watch a movie.

On the second day students were given a tour of The Materials Technology Department in Oxford and were very lucky to see both Scanning and Transmission electron microscopes in use. They participated in masterclass activities in the laboratories.

In the afternoon they visited the JET facilities at Culham in Oxfordshire. Joint European Torus is the world's largest nuclear fusion research facility. It is run as a collaboration between all European fusion organisations and the facility enables them to investigate fusion's potential as a safe and clean energy source for future generations. After a hearty evening meal, students were taken bowling.

The third day was spent entirely on the development of projects in the materials technology laboratories. This provided students with the opportunity to work with students from other schools explore the properties of modern materials and use new thinking to solve problems.

Students attended a black tie dinner in the evening and it must be said that they looked very handsome! This was followed by a table quiz and karaoke. The final morning was spent on the presentation of reports. This was very informative and entertaining. The lads did themselves proud, and it must be said that the Northern Ireland accent contributed to the humour on this occasion.

Finally students embarked on the long journey home, tired but happy and enriched by their experiences.

Smallpiece Trust staff must be commended for their caring, enthusiasm and dedication. They actually made the whole event so special.

Carbon Challenge Roadshow



This was a joint Geography/Science venture for Year 11 pupils and took place on Tuesday 15th April 2008. The Carbon Challenge Roadshow is the second part of The Enterprising Science Program. It is a high impact Science, Maths and Geography Roadshow sponsored by BP.

During The Carbon Challenge students worked together over two-hour sessions to examine our school's carbon footprint and learned about carbon reduction through a variety of activities using film, websites, interactive calculators and other visual material.

Presenters were of the highest standard providing entertainment and creating thought provoking scenarios. The entire program was very well received by students and is highly recommended.

Sentinus Workshop For Primary Schools

A workshop entitled 'Air Land and Sea' was delivered by Mr Gerard Hughes of Sentinus for Primary School visitors. All link primary schools took part including, Fountain, Lisnagelvin, Longtower, Nazareth House and Bunscoil Colmchille Primary Schools.

Medical Physics Lecture

Sue mc Grath of Science2Life delivered a lecture on 'Medical Physics' to AS Physics students on 17th April 2008. The audience included our own students, with visitors from Foyle & Londonderry College, Oakgrove Integrated College and St Columb's College.

Sue traced the history of Medical Physics from the discovery of X-rays and radioactivity in the 1890's to the era of Ultrasound, Magnetic Resonance, Computed Tomography and Nuclear Medicine, which we are familiar with today.

She placed particular emphasis on the structure of the eye, eye defects and colour blindness, topics which are all very relevant to the Module 1 AS Physics course. We observed some very interesting, if gory clips of laser eye surgery.

A big thank you to all Sue and all participating students and teachers.