

## Maths Challenge Revisited

Well done to Marcus Tranter (Year 7) and Oscar Ramos (Year 10) who correctly answered the maths question posed in the Newsletter before Christmas. The challenge was to determine how many integers between 100 and 1000 could not be represented as the sum of positive consecutive integers (e.g.  $25 = 3+4+5+6+7$ ). Both worked out that odd numbers can always be represented as the sum of consecutive numbers. For example, any multiple of 5 can be written as the sum of the numbers:

$n-2, n-1, n, n+1, n+2$  which equals  $5n$ .

An integer is the product of its prime factors, so a number with any odd prime factors can be written as the specified sum. Thus the numbers we want can only have 2 as a prime factor, so must be powers of 2 (i.e. 2, 4, 8, 16, 32 etc.). Between 100 and 1000 there are only three such numbers: 128, 256 and 512.



*Marcus (left) and Oscar with their prizes – Murderous Maths books. (There are many books in the Murderous Maths series and they are a good read.) Marcus said “At first the problem seemed impossible to answer, but after trying a few things, I worked out what to do.”*

If you would like to try some challenging maths questions, either individually or in a team, come to the Matrix Maths Club. You can eat your lunch and stretch your brain. Upcoming events for which we will be preparing include the Junior Maths Team Challenge (at Oxford University) and the Intermediate Maths Team Challenge (to be held at Wheatley Park School). Winners of these regional events will participate in the National Finals later in the year. Sixth-Formers will be able to work on a variety of material including STEP questions (from the Cambridge University Maths entrance exam).

## **Matrix Maths Club**

**Time and place:** Wednesday lunchtimes in M2 (starting Wednesday 23<sup>rd</sup> January). All welcome.

**Ms J Murray – Maths Faculty**

## **Higher Education and Careers Conference 2013**

This week all of our Year 12 students attended the annual East Oxfordshire Business Education Alliance, Careers and Higher Education Conference at Oxford Brookes University. The day started with two lectures – ‘Applying to University’ given by a Brookes Student Ambassador and the other focusing on ‘Student Life’ given by three recent graduates with very different experiences of University. Afterwards one of our students commented that she ‘felt much less nervous about applying to University now that the financial aspects of being a student had been explained to her.’

Students then attended two lectures of their choice from a range of twenty three subject areas including the Video Gaming Industry, Media, Sciences and Alternatives to Higher Education. These lectures were given by experts from local business and the Universities. Students were encouraged to start to think about and research suitable degree courses. There is plenty of information available to students in school both in the Careers Library and the Sixth Form Higher Education Library. The Careers Library staff are happy to advise and support students with their research.

**Mrs L Hounsell – Careers and Work Experience Manager**

<b>TERM DATES 2012</b>
<b>Term 3</b>
Tuesday 8 <sup>th</sup> January – Friday 8 <sup>th</sup> February
<b>Term 4</b>
Monday 18 <sup>th</sup> February – Thursday 28 <sup>th</sup> March
<b>Term 5</b>
Monday 15 <sup>th</sup> April – Friday 24 <sup>th</sup> May
<b>Term 6</b>
Monday 3 <sup>rd</sup> June – Friday 19 <sup>th</sup> July

### **CONTACTING YOUR SCHOOL**

Your views are very important to us, whether they're about your child, school activities or wider community issues. For all contact details telephone School Reception.

**If you have a concern about your child contact:**

- **The Subject Teacher** – if it concerns learning in a particular subject. Contact Reception to leave a message or alternatively, if you have internet access, you can ask for their email address.
- **The Head of Faculty** – if you wish to discuss any matter in greater detail.
- **Their Form Tutor** – if it is a more general issue about your child's well being.

Staff will endeavor to phone you back as soon as possible. All information is treated in the strictest of confidence. If you want to raise an issue or query about a more general area of school activity or a community matter contact a Parent Governor. (Telephone numbers available from School Reception)

**SCHOOL RECEPTION:** Telephone: 01865 374971

**SCHOOL EMAIL:** [office.4060@gosford-hill.oxon.sch.uk](mailto:office.4060@gosford-hill.oxon.sch.uk)

**SCHOOL WEBSITE:** [www.gosford-hill.oxon.sch.uk](http://www.gosford-hill.oxon.sch.uk)

**ABSENCE LINE:** Telephone: 01865 855378 (please use this number to report absences)

or

email – [absence.4060@gosford-hill.oxon.sch.uk](mailto:absence.4060@gosford-hill.oxon.sch.uk)

The Parent Support Site has information on supporting your child(ren) in a number of curriculum areas.