



MATHEMATICS



- A LEVEL MATHS SUBSCRIPTION to Dr Frost website tasks and activities to support A level Maths.
- Senior UKMT Maths Challenges for years 12 and 13.
- UKMT Team competitions – problem solving workshops for years 12/13
- Recommended subscription for Institute of Mathematics: Student
- Maths inspiration from Ben Sparks: Ben Sparks | mathematician musician speaker
- Summer schools - enrol on Imperial college courses: Summer schools | Be inspired | Imperial College London
- A-level Maths events and opportunities – Enrichment events and online workshops for students. Inspiring A level Mathematics students
- Year 12 Maths conference – organised by AMSP (Advanced Maths Support Programme) to develop deeper understanding of mathematical problem solving.
- Access to the SUMS magazine – Steps to University for Maths students: SUMS -
- CORE MATHS course – It focuses on using and applying maths to solve problems drawn from other subjects, work, and real life. The Core Maths course includes new content such as statistics, financial maths and using algebra.
- Maths and Climate change:
- Mathematics: The Winton Gallery: shows us how mathematicians, their tools and ideas have helped build the modern world over the past four centuries.
- Bank of England Museum: explore the economic and financial history of the UK.
- Provision of hard copies of year 12 & 13 text books which enables students to access a range of exam practice resources.

RECOMMENDED READING LIST:

- The Simpsons and their mathematical secrets
- The Simpsons and their mathematical secrets, by Simon Singh. See how a writing team of mathematicians include mathematics within this popular animation.
- Hello World: How to be Human in the Age of the Machine
- Read Hello World, How to be Human in the age of the machine, by Dr Hannah Fry. You are accused of a crime. Who would you rather determines your fate – a human or a machine?
- Power in Numbers: The Rebel Women of Mathematics by Talithia Williams. Read about female mathematicians throughout history.

FURTHER WIDER READING LIST:

- How to Solve It George Polya An old gem. First published in 1945, this book is an invaluable and timeless guide to mathematical problem-solving. The Fields medallist Terry Tao describes it as the book from which he himself learnt. This is the paperback edition, with an interesting and entertaining foreword by Ian Stewart. The Kindle edition (2014) has a foreword by John H. Conway. Highly recommended.
- How to study for a maths degree Lara Alcock. This sounds like the sort of book that could be terrible, but it turns out to be rather good. What is written on the cover tells you accurately what is inside, so there is no need to say any more. Definitely worth a look.
- How to Think like a Mathematician Kevin Houston. There is lots of good mathematics in this book (including many interesting exercises) as well as lots of good advice. How can you resist a book the first words of which (relating to the need for accurate expression) are: Question: How many months have 28 days? Mathematician's answer: All of them.