



## A level Mathematics

[Transition Website](#) - This has all the links to the content which links to A level and good preparation for starting in September.

### Puzzles and Problem Questions/Resources

- UKMT - [Intermediate Mathematics Challenge](#) - Lots of problems and puzzles to test your knowledge in different ways. You will have an opportunity to sit the [Senior Mathematics Challenge](#) whilst at college so the intermediate is ideal preparation.
- Nrich: [Nrich](#) has a range of problems, activities, games and articles for 11-18 pupils.
- Alex Bellos writes a fortnightly puzzle column for The Guardian which is published on their website: [Alex Bello's Monday Puzzle](#)
- BBC Radio 4's Today programme broadcasts a puzzle every morning at around 6:50am. You can find the archive on their website [here](#).
- Plus magazine (<https://plus.maths.org/content/>) has a great range of puzzles and maths articles to inspire you to see the application of the subject.
- [Mind your Decisions Blog](#) - A lot of fun puzzles/problems often with video explanations. Some can be quite tough so more aimed at further maths/maths academy
- Pencil puzzles (Sudoku etc) <https://puzz.link/db/> <https://www.puzzlemix.com/>
- [Parallel](#) by Simon Singh - Weekly maths challenges
- [@FryRsquared](#) (Twitter/X)
- [Uncharted](#) (BBC Sounds) Podcast
- [Vsauce](#) (YouTube)
- [Cracking the Cryptic Sudoku](#) (YouTube)

- [More or Less](#) (Podcast)
- [Daniel and Jorge Explain the Universe](#) (Podcast)
- [Numberphile](#) (YouTube)

## Wider Reading

- The Number Mysteries: A Mathematical Odyssey Through Everyday Life (Marcus du Sautoy)
- The Calculus Wars (Jason Bardi)
- How Long is a Piece of String? (Rob Eastaway and Jeremy Wyndham)
- Why do buses come in threes? (Rob Eastaway and Jeremy Wyndham)
- The Hidden Mathematics of Sport (Rob Eastaway and John Haigh)
- Maths on the back of an envelope (Rob Eastaway)
- Alex's Adventures in Numberland (Alex Bellos)
- The Simpsons and their Mathematical Secrets (Simon Singh)
- 1089 and All That: A Journey into Mathematics (David Acheson)
- e: the Story of a Number (Eli Maor)
- 17 Equations that Changed the World (Ian Stewart)
- Why Beauty is Truth (Ian Stewart)
- Leonardo, the first scientist (Michael White)
- Freakonomics (Steven Levitt & Stephen Dubner)



## ADDITIONAL READING AND ACTIVITIES LIST

# MATHS

## A level Further Mathematics

[Transition Website](#) - This has all the links to the content which links to A level and good preparation for starting in September.

Puzzles and Problem Questions/Resources

*See the A level Mathematics ones*

## Wider Reading

- The Code Book (Simon Singh)
- An Imaginary Tale The Story of  $\sqrt{-1}$  (Paul J. Nahim)
- Hello World: How to be Human in the Age of the Machine (Hannah Fry)
- The Music of the Primes (Marcus du Sautoy)
- Fermat's Last Theorem (Simon Singh)
- Uncle Petros and Goldbach's Conjecture (Apostolos Doxiadis)



## A level Statistics

- [More or Less](#) (Podcast)
- [Chartr](#) (Website) and [@Chartrdaily](#) (Twitter/X)

## Wider Reading

- Taking Chances (John Haigh)
- Does God play dice? (Ian Stewart)



## CTEC Engineering

### *TinkerCAD*

Free online CAD (Computer Aided Design Software) which looks at design both for products and electrical circuits. Can create a free account with any email address and work through their fun tutorials - The tutorials go through [3D design](#), [circuit design](#) and [codeblocks](#)