

Preparing for A-Level Mathematics & Further Mathematics



Wonder

Explore

Do

Mathematics

What you will need checklist	To do checklist
Π Lever arch folder	Π Use the links below to explore some enriching super-curricular mathematics
Σ Folder dividers	Σ Complete the induction-work which will be handed out on results day
Π A-Level Calculator 'Casio fx-991 CW' This can be purchased on ParentPay from school in the new term. We advise not purchasing from online stores as we have seen fake models that do not work correctly.	This work, set by Pearson Edexcel, is intended to link GCSE and A-Level specifications. Please do your best on it and use the links to support you if you are unsure how to go about answering a question. This is to be brought to your <u>first</u> Mathematics lesson in Y12.

Wonder Explore Do

Universities now see super curricular as a compulsory element of the admissions process. Those actively extending their knowledge stand out amongst other applicants.

These resources will take you to reading or watching outside the curriculum. If you don't enjoy one area, try another and see what ignites your passion!

The 'Do' section has mathematical challenges to get your head around!

The University of Cambridge has also published information [here](#) about super-curricular for many subjects.

Watch

[TED talk: Was maths invented or discovered?](#) (5 mins)

[BBC's Horizon: Fermat's last theorem](#), interview with Andrew Wiles (50 mins)

[TED talk: How big is infinity?](#) (7 mins)

[TED talk: Maths is the hidden secret to understanding the world](#) (17 mins)

[TED talk: The mathematical secrets of Pascal's triangle](#) (4 mins)

Read

[Pi, what's in a number?](#)

[Game Theory](#)

[Death by number...the historical dangers of being a mathematician!](#)

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Do

[Prime Triangles](#)

[LCM Sudoku](#)

[Staircase sequences](#)