

WHY CHOOSE MATHEMATICS?

- I ENJOY IT !
- IT IS USEFUL AND SUPPORTS MORE JOB OPPORTUNITIES
- I THINK I AM GOOD AT IT ?
- IT REINFORCES MY OTHER SUBJECTS
- IT IS HIGHLY REGARDED BY HIGHER EDUCATION ESTABLISHMENTS (often more highly regarded than the obvious subject to be studied, eg. Geology)
- EARN EVEN MORE MONEY ONE DAY ?

WHY NOT CHOOSE MATHEMATICS ?

- DO NOT ENJOY IT SO WILL NOT PUT ENOUGH TIME INTO IT
- IT IS A HARD SUBJECT
- ‘ NASTY’ TALL TEACHER WHO MIGHT TRY AND MAKE ME WORK TOO HARD

Year 12

'A/S' Level Maths

Core Maths 1	(C1)
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Core Maths 2	(C2)
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Statistics 1	(S1)
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- Each Module is assessed by a 1½ hour written exam in (June)
- (No Coursework)

FROM SEPTEMBER 2004

- The content of 'A' Level Maths was reduced by one-sixth

Module C1 Exam is Non-Calculator

HOORAY!



Year 13 'A' Level Maths

Core Maths 3 (C3)

Core Maths 4 (C4)

Mechanics 1 (M1)

(added to C1, C2 & S1 from Year 12)

- Each module is assessed by a 1½ hour written exam
- No coursework

Available in Year 13 subject to demand

'A/S' Level Further Maths

Further Pure 1 (FP1)

Further Pure 2 (FP2)

Statistics 2 (S2)

'A' Level Further Maths

Further Pure 1 (FP1)

Further Pure 2 (FP2)

Statistics 2 (S2)

Discrete Maths 1 (D1)

Mechanics 2 (M2)

Further Pure 3 (FP3)

'A' Level Maths Results

Year	A	B	C	D	E	N
2005	15	5	4	2	0	0
2006	12	4	1	1	0	0
2007	18	7	1	1	0	0
2008	27	16	5	1	2	0
2009	17	10	5	5	2	0

- Over 55% of all students have gained a grade A
- Approximately 81% of all students have attained grade A or B

- Last year the value added scores indicated that students over-performed by two-thirds of an 'A' Level grade compared to the average in other institutions

- People with maths A-Level go on to earn significantly more than their peers with equivalent qualifications in different subjects. (Research from London School of Economics)
- People who had only scraped a pass in the subject still enjoyed a higher income later in life – even the few who got a grade E earned 8 per cent more than those who did not take maths.

Background knowledge

- The arithmetic of integers (incl. HCFs and LCMs), of fractions, and of real numbers.
- The laws of indices for positive integer exponents.
- Solution of problems involving ratio and proportion (incl. similar triangles, and links between length, area and volume of similar figures).
- Elementary algebra (incl. multiplying out brackets, factorising quadratics with integer coefficients (to include $a^2 - b^2$) and solution of simultaneous linear equations by eliminating a variable).
- Changing the subject of a simple formula or equation.
- The equation $y = mx + c$ for a straight line: gradient and intercept.

Background knowledge

- The distance between two points in 2D with given co-ordinates.
- Solution of triangles using trigonometry, including the sine and cosine rules.
- volume of cone and sphere.
- The following properties of a circle:
 - the angle in a semicircle is a right angle;
 - the perpendicular from the centre to a chord bisects the chord;
 - the perpendicularity of radius and tangent.

➤ *Any questions?*