

# MATHS



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This evening we  
are going to  
tell you about:

- Course structure
- Assessment
- Extra resources
- Potential degree and apprenticeship routes from this A-Level
- Subjects that work well with this subject
- Potential career opportunities



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# What our students say:

Teachers push  
me to get top  
grades

Challenging  
but  
rewarding

The best subject  
for revision  
management,  
easy to revise

Satisfying  
and  
enjoyable!

Passionate teachers  
who go out of their  
way to help you



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# Course Structure

- 2/3 is Pure Maths
- 1/3 is Applied Maths – this is split into Statistics and Mechanics
- All the content is compulsory, there is no longer the option to choose a module



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Year 12 Pure	Year 12 Applied	Year 13 Pure	Year 13 Applied
Indices/Surds	Data Collection	Proof	PMCC
Solving Quadratics	Linear Interpolation	Partial Fractions	Conditional Probability
Simultaneous Equations	Standard Deviation	Modulus Graphs	The Normal Distribution
Inequalities	Box Plots & Outliers	Sequences and Series	Hypothesis Testing
Graph Transformations	Histograms	Binomial Expansion	Moments
Straight Line Graphs	Correlation	Radians	Centres of Mass
Equation of a Circle	Probability Venn Diagrams	Sec, Cosec and Cot	Tilting
Polynomial Long Division	Binomial Probability	Solving Trig Equations	Resolving Forces
Proof	Hypothesis Testing	Parametric Equations	Inclined Planes
Binomial Expansion	Vectors in Mechanics	Implicit Differentiation	Friction
Trig Identities	Velocity Time Graphs	Connected Rates of Change	Projectiles
Vectors	SUVAT equations	Numerical Methods	Ladders
Differentiation	$F = ma$	Integration	Pulleys on a Slope
Exponentials & Logarithms	Pulleys	Solve differential equations	Vectors in kinematics
Integration	Using calculus in mechanics	Vectors	Calculus with vectors

# Assessment

- At the end of Year 12, we internally set an AS level (2h Pure, 1h 15m Applied). This DOES NOT count towards the A level. It is used to assess your progress and inform predicted grades.
- At the end of Year 13, there will be 3 papers
  - 2 x 2 hour Pure
  - 1 x 2 hour Applied



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# Extra Resources

- The main resource is the Edexcel textbook
- You will also be given a book of all the Maths Genie worksheets
- Mrs Mawson has made HUNDREDS of teaching videos during lockdown that you can watch, very useful if you are absent for a lesson
- Drop-in once a week to get help
- Detailed exam packs, bursting with past papers, formulae and handmade revision posters, no other college offers these!

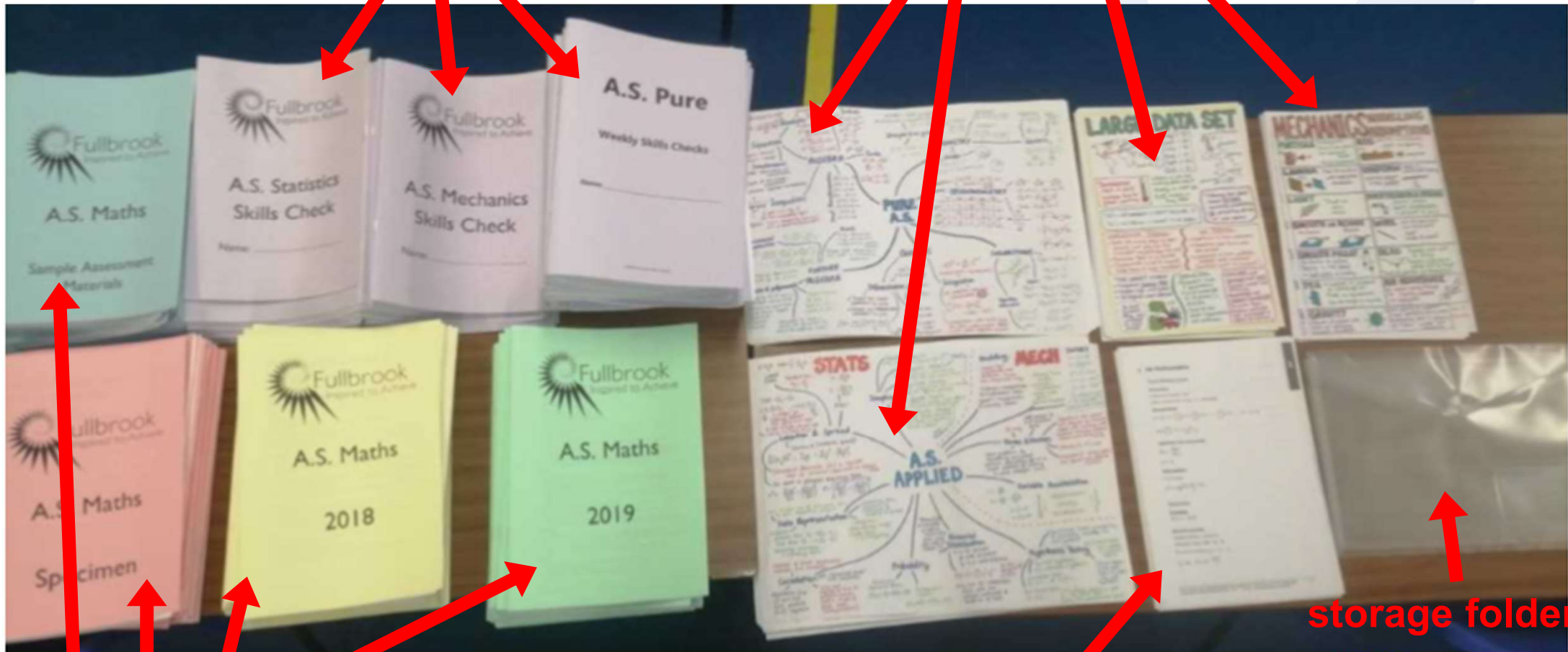


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skills checks

handmade revision posters



practice papers

formula sheet

storage folder

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# Potential Degree/Apprenticeship Routes

- Maths is the **MOST COMMON** A level amongst UK university students... every single year!
- It is **HIGHLY** respected by all Higher Education Providers
- The logic and problem solving skills that an A level in maths demonstrate are extremely transferable and sought after in higher education and the working world



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# Subjects that work well with maths

- The MOST common ones are:

Physics, Economics, Computer Science

- Also very common are:

Biology, Chemistry, Business, Psychology

- Ultimately, maths goes with anything



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# Potential Career Opportunities

- ❑ Software Developers
- ❑ Engineers (mechanical, civil, aeronautical)
- ❑ Investment Analysts
- ❑ Accountants
- ❑ Operational Researchers
- ❑ Teachers
- ❑ Architects
- ❑ Cryptanalysts
- ❑ Stockbrokers



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