

GCSE Mathematics at Dallam School

How do the exams work?

- Your exam board is Edexcel
- You will sit 3 papers at either Foundation or Higher Tier
- Paper 1 is non-calculator, Paper 2 and Paper 3 are both calculator papers
- Each paper is 80 marks and lasts for 1 ½ hours (unless you are entitled to extra time)

The exam dates are:

- Paper 1 – Friday 19th May
- Paper 2 – Tuesday 6th June
- Paper 3 – Wednesday 14th June

How should I revise?

Mathematics is about using skills, rather than remembering facts. This means that the best preparation is to practice completing exam style tasks, preferably in exam conditions.

Useful ways of doing this are:

- Completing past papers (available from school or online)
- Completing exam style questions (available from school or online)

Good places to find exam papers and questions are:

<https://www.mathsgenie.co.uk/>

<https://www.bland.in/>

<https://www.onmaths.com/>

Your teacher will be setting an exam paper every week from January onwards.

Year 11 are welcome to come for revision sessions which run at lunchtimes in room 1. These run on Tuesday, Wednesday, Thursday and Friday from 12.30 til 13.00

“The only way to learn mathematics is to do mathematics” P.R. Halmos

What is on the exams?

The exams cover (but aren't limited to):

Number: Work interchangeably with terminating decimals and their corresponding fractions. Apply formal written methods to integers, decimals and simple fractions (proper and improper) and mixed numbers. Calculate with standard form. Solve problems involving rounding, estimation and bounds.

Algebra: Use correct notation and substitute values into formulae. Simplify and manipulate algebraic expressions. Rearrange formulae. Work with coordinates in all four quadrants and plot graphs of equations. Identify and interpret gradients and intercepts of linear functions. Solve equations and inequalities. Generate and use the n th term of a sequence.

Ratio, Proportion and Rates of Change: Change freely between related standard units. Use scale factors, scale diagrams and maps. Use ratio notation and divide in a ratio. Solve problems involving direct and inverse proportion. Solve compound interest problems. Use compound units such as speed, density and pressure.

Geometry and Measure: Apply angle properties to determine missing angles and use the angle sum of any polygon. Describe and construct congruent and similar shapes. Perform and describe transformations. Identify and apply circle definitions and properties. Construct and interpret plans and elevations. Know the formulae for Pythagoras' theorem and the trigonometric ratios. Know and apply formulae to calculate area and volume.

Probability and Statistics: Analyse the frequency of outcomes of probability experiments using tables and frequency trees. Use appropriate language and the 0 - 1 probability scale. Use and construct tables, grids, Venn diagrams and tree diagrams. Interpret and construct tables, charts and diagrams including frequency tables, bar charts, pie charts and pictograms for categorical data. Use and interpret scatter graphs.