

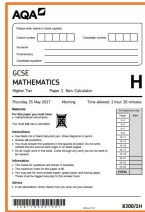
In lessons and revision at home, you will be working on topics highlighted by PPE3 as well as examination technique.

Maths Curriculum Map



Exam

A second set of "mocks" in December measures our improvement since PPE 1, and progress towards our final grades.



If you perform very strongly in PPE 1, you may be invited to take GCSEs in Further Mathematics and / or Statistics as well as Mathematics. You will study for them at the same time as you are revising for the Mathematics papers.

Examination Year!!!

We sit a complete set of past GCSE examination papers under test conditions. This will measure our progress towards our final grades.

Revision & Final Exam Preparation

PPE 3

In January and February, we review how we performed in PPE 2 to prepare for PPE 3.

PPE 2

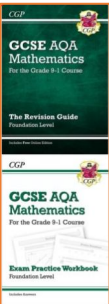
In the Autumn Term, we revise key topics and work on our examination technique in preparation for PPE 2.

Further Maths and Statistics

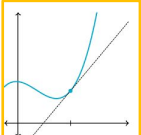
Everything we do this year is focused on preparing for our GCSE examinations.

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PPE 1



A final set of "mocks" in February tell us what we still need to do to prepare for our final examinations.



Ratio and Proportion

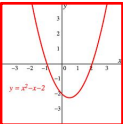
We solve quadratic equations by using the formula and completing the square; learn what identities are and how to prove them; rearrange non-linear equations and formulae; form equations for direct and inverse proportionality; introduce functions; and find composite and inverse functions.

$$(3 \times 10^8) \times (2 \times 10^2)$$
$$3 \times 2 \times 10^8 \times 10^2$$
$$6 \times 10^{10}$$

Algebra

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

when $ax^2 + bx + c = 0$



Algebra

We look at prime factorization of numbers; continue to develop our understanding of powers and roots; look at standard form. In depth; and start to learn about surds.

We look at quadratics in depth – learning to expand double brackets, factorise quadratic expressions, and solve simple quadratic equations. We learn to solve more difficult linear equations; look in depth at linear and quadratic sequences; and start to learn advanced skills for drawing and interpreting graphs.

Number Skills

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$$\text{Base } 2^4 \text{ Index}$$

Ratio and Proportion



Probability and Statistics

We find angles in triangles, quadrilaterals and other polygons; learn about corresponding, alternate, co-interior and vertically opposite angles; revisit constructing triangles accurately; start to construct loci and bisectors; and learn about Pythagoras' theorem.

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We learn about highest common factors and lowest common multiples; look at powers; start to talk about standard form; and continue to learn about fractions, decimals and percentages.

Number Skills

Algebra

Distance: Earth → Moon 3.844×10^8 metres



$$\begin{array}{r} x + 15 = 32 \\ -15 \quad -15 \\ \hline x = 17 \end{array}$$

Ratio and Proportion

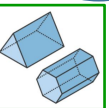
We expand brackets and factorise linear expressions; learn more about solving equations and using and rearranging formulas; talk about quadratic expressions; and learn about graphs and sequences.

Year End SALE 3 DAYS ONLY 70% OFF

Number Skills

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We develop skills to answer questions such as "what's the probability of getting 2 sixes when 2 dice are rolled?"; talk about ways of presenting data in various tables; and learn how to find the mean, median, mode and range of data presented in tables.



An Introduction to Probability and Statistics

We talk about points, lines, vertices and edges; build on the angle facts introduced in the key stage 2 curriculum; and learn how to construct triangles accurately.

An Introduction to Geometry and Measure

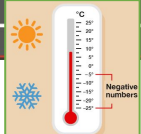
We develop key skills such as simplifying ratios, finding equivalent ratios and sharing in a ratio; and learn to how to tackle simple real life problems including adapting recipes and using map scales.

An Introduction to Ratio and Proportion

An Introduction to Algebra

$$\begin{array}{c} D \\ S \\ T \end{array}$$
$$\text{Speed} = \frac{\text{distance}}{\text{time}}$$
$$\text{time} = \frac{\text{distance}}{\text{Speed}}$$
$$\text{distance} = \text{Speed} \times \text{time}$$

Number Skills



Baseline assessment

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