

Y11 MATHS



MATHS AT YARDLEYS

INTENT: At Yardleys, we want our pupils to see Mathematics as a universal language that allows us conceptualise and communicate ideas clearly across the curriculum and beyond. Throughout our curriculum, we develop mathematicians that are empowered with the knowledge, attitude and strategies to reason, generalise and simplify complex problems into their composite parts. Our pupils are fluent in the key mathematical processes so that they may become flexible and creative problem solvers that are resilient when faced with challenges.

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Year 11 concludes the KS4/GCSE curriculum. Pupils are now fluent in the main areas of mathematics and are now able to tackle higher level concepts. The curriculum emphasises the connections between topics and encourages pupils to bring together their knowledge to tackle unseen problems.

YEAR 11

SUBSTANTIVE KNOWLEDGE	<ul style="list-style-type: none"> • Identities (Equating Coefficients) • Solving Quadratic Equations – 3 Ways: (Factorising, Formula & Completing the square) • Sketching Quads • Iteration • Functions & Inverse Functions • Inequalities & Regions • Constructions & Loci (Regions) • Equation of a Circle & Tangents • Linear Simultaneous Equations • Non-Linear Simultaneous Equations • SINE & COSINE rules • Area Formula 	<ul style="list-style-type: none"> • Angles in Polygons • Circle Theorems • Transformations (TRRE) • Vectors • Growth & Decay • Knowledge of Graphs • Transformation of Graphs • Gradient to a Curve • Area under a Curve/ Graph 	<p>* [EXAM PAPER PRACTICE & TARGETED REVISION]</p> <p>GCSE – Maths – Paper 1</p> <p>GCSE – Maths – Paper 2</p> <p>GCSE – Maths – Paper 3</p>
DISCIPLINARY KNOWLEDGE	<p>Develop fluency & Reason mathematically</p>	<p>Develop fluency & Reason mathematically</p>	<p>Develop fluency & Reason mathematically</p>