## **Y9 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.

## **Y9 MATHS**

Year 9 concludes KS3 by building on the work done in years 7 and 8 to apply the methods learned to new contexts while introducing graphical representations and more advanced algebraic and geometric techniques.

YEAR 9			
SUBSTANTIVE KNOWLEDGE	<ul> <li>Place Value and intro to standard form</li> <li>Rounding and estimation</li> <li>Decimals and negative numbers</li> <li>Forming expressions</li> <li>Basic angles and parallel lines</li> <li>FDP of Amounts</li> <li>Bearings and Scales</li> <li>Indices</li> <li>Expand and factorise single brackets</li> <li>Graphs and tables</li> <li>Averages</li> <li>Operations with Fractions</li> </ul>	<ul> <li>Compound measures (speed)</li> <li>Percentages of an amount/expressing/comparing</li> <li>Substitution</li> <li>Solving linear equations</li> <li>Angles in triangles, quadrilaterals and Polygons</li> <li>Averages</li> <li>Cumulative frequency</li> <li>Charts and Tables</li> <li>Operations with Fractions</li> <li>Probability</li> <li>Simple Algebraic fractions</li> <li>Proof</li> <li>Standard Form</li> <li>Compound Measures Probability</li> </ul>	<ul> <li>Rearranging</li> <li>Introduction to Pythagoras' theorem</li> <li>Solving and representing inequalities</li> <li>BIDMAS and units of measure</li> <li>Simultaneous equations</li> <li>Constructions &amp; loci</li> <li>Area of 2D shapes</li> <li>Expanding brackets</li> <li>Equating Coefficients</li> </ul>
DISCIPLINARY KNOWLEDGE	Develop fluency Reason mathematically Solve problems	Develop fluency Reason mathematically Solve problems	Develop fluency Reason mathematically Solve problems

We aim to provide students with a curriculum that educates the whole child, creating responsible and respectful citizens. Through the development of substantive and disciplinary knowledge students are given the tools that allow them to achieve excellence and be ready for life.