

Learning overview for: Mathematics			Year group: Year 7	
Term	Key topics	What most pupils will learn (prior assessment may alter starting point & content)	How might this learning be extended?	How will this learning be assessed?
	<p><i>Number</i></p> <p><i>Percentages</i></p> <p><i>Negative Numbers</i></p> <p><i>Algebra</i></p>	<p>Written methods of calculations Decimals Rounding</p> <p>To calculate percentages with and without a calculator</p> <p>To understand the place of negative numbers To add and subtract negative numbers</p> <p>To collect like terms and simplify To expand a single bracket</p>	<p>Rounding to significant figures</p> <p>To calculate percentage increases and decreases</p> <p>To use the rules of negative numbers for addition and multiplication</p> <p>To expand a set of brackets To factorise a simple expression</p>	<p>To be assessed by end of unit assessments</p>
	<p><i>Averages</i></p> <p><i>Angles</i></p> <p><i>Equations</i></p> <p><i>Coordinates</i></p>	<p>To calculate averages for discrete data</p> <p>To identify properties of 2D shapes To estimate, measure and draw angles</p> <p>To use angle facts to solve basic problems</p> <p>To use function machines To solve basic and 2-stage equations</p> <p>To plot coordinates in one quadrant To solve problems involving coordinates</p>	<p>To calculate averages for grouped data</p> <p>To solve more complex angle problems</p> <p>To solve equations with brackets</p> <p>To plot coordinates in four quadrants</p>	<p>To be assessed by end of unit assessments</p>

	Number	To identify types of numbers To use a calculator to find squares and cubes	To use a calculator to solve more complex problems	
	Algebra	To substitute whole numbers into expressions	To substitute a variety of numbers into expressions To use indices rules for multiplying and dividing	
	Pythagoras	Not all students will study this topic	To calculate missing lengths in right angled triangles	
	Area & Volume	To use metric units To calculate perimeter and area of simple shapes To calculate the volume of cuboids	To calculate areas of compound shapes To calculate the volume of prisms	
	Fractions	To find equivalent fractions and fractions of amounts To solve problems with fractions	To solve problems involving mixed numbers	To be assessed by end of unit assessments
	Sequences	To describe and complete sequences	To find the nth term of a sequence	
	Data Handling	To collect and interpret data	To draw and interpret more complex charts and graphs	
	Probability	To understand probability scale To calculate simple probabilities	To calculate probabilities adding to 1	
	Graphs	To interpret real life graphs (conversion, distance/time)	To construct linear graphs from an equation	To be assessed by end of unit assessments
	Transformations	To understand line and rotational symmetry To complete reflections, translations and Rotations	To complete enlargements	

	Ratio	To simplify ratios To solve ratio problems	To share amounts into a ratio	
	Algebra	To collect terms and simplify To expand brackets To solve basic 2-stage equations	To expand sets of brackets To solve equations with brackets and with fractional/negative solutions	
	Number	To calculate percentages of amounts To solve problems involving percentages To solve problems involving fractions	To solve more complex questions with percentages and fractions	
	Probability	To calculate probabilities of events	To calculate probabilities using sample space diagrams	To be assessed by end of unit assessments
	Construction	To construct triangles with one side and two angles	To construct all types of angles	
	Inequalities	To understand inequality signs	To show an inequality on a number line	