



ABINGDON

HOUSE SCHOOL

Curriculum map overview for Year 8

Maths: 2025/26

<i>Term</i> <i>(Weeks)</i>	<i>Topic/Unit (weeks)</i>	<i>Key Objectives</i>	<i>Type of assessment</i>
<i>Week 1</i> <i>(First full week)</i>	<i>Initial evaluation</i>	This is the time to establish routines with the children, fostering positive relationships, and gaining a clear understanding of their individual learning needs.	

Autumn 1 (7)	Ratio (2)	<ul style="list-style-type: none"> • To understand a ratio. • To explore ratio problems. • To simplify ratios. • To express ratios in the form 1:n and n:1. • To compare ratios and fractions. • To solve ratio problems. 	
	Proportion and scale (2)	<ul style="list-style-type: none"> • To explore direct proportion. • To explore conversion graphs. • To convert between currencies. • To interpret and understand direct proportion graphs. • To explore similar shapes. • To convert metric units. • To explore scale diagrams. • To interpret maps using scale and ratios. 	
	Algebraic manipulation.	<ul style="list-style-type: none"> • To form algebraic expressions. • To identify and use formulae, expressions, identities and equations. • To simplify expressions. • To use directed numbers with algebra. • To use substitution with a directed number. • To expand a single bracket. • To factorise into a single bracket. • To expand single brackets and simplify. 	

		<ul style="list-style-type: none"> • To expand double brackets. • To factorise quadratic expressions. 	
Autumn 2 (7)	Coordinates and graphs	<ul style="list-style-type: none"> • <i>To explore coordinates in all four quadrants.</i> • <i>To explore lines parallel to the axes.</i> • <i>To explore a table of values.</i> • <i>To recognise and use the line $y=x$</i> • <i>To explore lines $y=mx$ to direct proportion.</i> • <i>To introduce gradient ($y=mx$)</i> • <i>To explore lines with a negative gradient.</i> • <i>To find a midpoint of a line segment.</i> • <i>To solve problems with coordinates and graphs.</i> 	
	Multiply and divide fractions.	<ul style="list-style-type: none"> • <i>To divide a fraction by an integer.</i> • <i>To multiply a fraction by an integer</i> • <i>To multiply and divide fractions.</i> • <i>To understand reciprocals.</i> • <i>To multiply and divide mixed numbers</i> • <i>To multiply and divide algebraic fractions.</i> 	

	Symmetry and reflection	<ul style="list-style-type: none"> • <i>To explore the line of symmetry</i> • <i>To explore rotational symmetry.</i> • <i>To reflect a shape in a horizontal or vertical line.</i> • <i>To reflect a shape in a diagonal line.</i> • <i>To describe a reflection.</i> 	
Spring 1 (6)	Area, volume and density	<ul style="list-style-type: none"> • <i>To Name 2-D and 3-D shapes</i> • <i>To explore Area of a 2-D shape</i> • <i>To explore Area of a compound shape</i> • <i>To Recognise prisms (including language of edges and vertices)</i> • <i>To explore Volume of cubes and cuboids.</i> • <i>To be able to convert metric units of mass and capacity</i> • <i>To be able to understand the units of mass/density/volume.</i> • <i>To be able to solve problems with density, mass and volume</i> • <i>To solve the Area and volume in similar shapes (E).</i> 	
	Equations and inequalities	<ul style="list-style-type: none"> • <i>Solve simple 1 and 2-step equations</i> • <i>Solve more complex equations</i> • <i>Solve fractional equations</i> • <i>Form and solve equations</i> • <i>Solve equations with unknowns on both sides</i> • <i>Understand and use inequalities</i> • <i>Inequalities on a number line</i> • <i>Solve simple inequalities</i> • <i>Form and solve inequalities</i> • <i>Solve inequalities with unknowns on both sides (E)</i> 	

	Percentage	<ul style="list-style-type: none"> • <i>Percentage of an amount</i> • <i>To convert between percentages and decimals</i> • <i>Use multipliers to find percentages</i> • <i>Convert between decimals and percentages greater than 1</i> • <i>Percentage increase using a multiplier</i> • <i>Percentage decrease using a multiplier</i> • <i>Percentage increase and decrease using a multiplier</i> • <i>Express one number as a fraction or a percentage of another (calculator)</i> • <i>Express one number as a fraction or a percentage of another (non-calculator)</i> • <i>Percentage change</i> • <i>Find the original value given a percentage</i> • <i>Choose appropriate methods to solve percentage problems</i> 	
Spring 2 (6)	Indices	<ul style="list-style-type: none"> • <i>Add and subtract expressions with indices</i> • <i>Multiply and divide expressions with indices</i> • <i>Addition law for indices</i> • <i>Subtraction law for indices</i> • <i>Addition and subtraction laws for indices</i> • <i>Powers of powers (E)</i> • <i>Negative indices (E)</i> • <i>Fractional indices (E)</i> 	

	Standard form	<ul style="list-style-type: none"> • To explore <i>Positive and negative powers of 10</i> • To explore <i>Numbers greater than 1 in standard form</i> • To explore <i>Numbers between 0 and 1 in standard form</i> • To explore <i>standard form on a calculator.</i> 	
	Interpret and represent data	<ul style="list-style-type: none"> • To explore <i>types of data</i> • To explore <i>Outliers and errors</i> • To understand <i>averages and range</i> • To be able to choose the most <i>appropriate average</i> • To compare <i>distributions using average and the range</i> • To find <i>averages from an ungrouped frequency table</i> • To represent and interpret <i>grouped discrete data</i> • To represent and interpret <i>continuous data grouped into equal classes</i> • To be able to find the <i>mean and mode from a grouped frequency table (E)</i> 	
Summer 1 (5)	Angles in parallel lines and polygons	<ul style="list-style-type: none"> • To look at <i>basic angles rules and notation</i> • To explore <i>angles between parallel lines and a transversal</i> • To build an understanding of <i>alternate and corresponding angles</i> • To build an understanding of <i>Alternate, corresponding and co-interior angles</i> • To Solve <i>complex problems with angles in parallel lines</i> • To build an understanding of the <i>Properties of special quadrilaterals and their diagonals</i> • To be able to find <i>sides and angles in special quadrilaterals</i> • To build an understanding of <i>Exterior</i> 	

		<p><i>angles of a polygon</i></p> <ul style="list-style-type: none"> • <i>To build an understanding of Interior angles of a polygon</i> • <i>To build an understanding of Interior angles in a regular polygon</i> • <i>To build an understanding of how to Prove simple geometric facts (E)</i> 	
	Tables and probability	<ul style="list-style-type: none"> • <i>To build an understanding of Probability vocabulary</i> • <i>To build an understanding of The probability scale</i> • <i>To build an understanding of the Probability of a single event</i> • <i>To Use the sum of probabilities being equal to 1</i> • <i>To build an understanding of probability experiments.</i> • <i>To build an understanding of Sample spaces for 1 or more events.</i> • <i>To build an understanding of Probabilities from sample space diagrams.</i> • <i>To build an understanding of Two-way tables</i> • <i>To build an understanding of probabilities from two-way tables.</i> • <i>To build an understanding of Frequency trees.</i> • <i>To build an understanding of Probabilities from frequency trees.</i> 	
Summer 2 (6)	Circles (2)	<ul style="list-style-type: none"> • <i>To understand Circle vocabulary</i> • <i>To explore Pi as a ratio</i> • <i>To explore the circumference of a circle</i> • <i>To explore the perimeter of parts of a circle</i> • <i>To explore the Area of a circle</i> • <i>To explore the area of parts of a circle</i> • <i>To explore the area and circumference of a circle</i> • <i>To recap perimeter of compound shapes with circles</i> • <i>To recap perimeter and area of compound shapes with circles.</i> 	

	<i>Graphs and charts</i>	<ul style="list-style-type: none"> • <i>To recap Pictograms and bar charts</i> • <i>To explore Vertical line charts</i> • <i>To be able to Draw pie charts</i> • <i>To Interpret pie charts</i> • <i>To interpret and draw Line graphs</i> • <i>To choose the most appropriate graph or chart</i> • <i>To compare distributions using graphs</i> • <i>To explore misleading graphs and charts</i> 	
	<i>Sequences</i>	<ul style="list-style-type: none"> • <i>To generate and describe a sequence given a rule in words</i> • <i>To be able to generate a sequence given a simple algebraic rule</i> • <i>To be able to find the nth term of a linear sequence</i> • <i>To be able to generate a sequence given a complex algebraic rule (E)</i> 	