



Curriculum Map



Subject: Mathematics

Year group: 10

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Content</p> <p><i>Declarative Knowledge – ‘Know What’</i></p>	<p>Similarity Congruency, similarity and enlargement Trigonometry</p>	<p>Developing algebra Representing solutions of equations and inequalities</p>	<p>Geometry Angles and bearings Working with circles Vectors</p>	<p>Proportions and proportional change Ratios and fractions Percentages and interest Probability</p>	<p>Delving into data Collecting representing and interpreting data</p> <p>Using number Non-calculator methods</p>	<p>Using number Types of number and sequences Indices and roots</p>
<p>Skills</p> <p><i>Procedural Knowledge – ‘Know How’</i></p>	<ul style="list-style-type: none"> Understand the difference between congruence and similarity Enlarge a shape about a given point; understand and use similarity Find missing sides in similar shapes including pairs of similar triangles Understand and use the conditions for a pair of congruent triangles Understand trigonometric ratios Work out missing lengths and angles in right-angled triangles Know and use the exact values of key angles 	<ul style="list-style-type: none"> Form and solve equations and inequalities in a variety of contexts, including with unknowns on both sides Represent solutions to inequalities on a number line Represent solutions to equations graphically 	<ul style="list-style-type: none"> Review Ks3 angles rules Understand and use bearings Review area and circumference Names parts of a circle and perform related calculations Find areas and volumes related to circles – cylinder, cone sphere etc. Understand vector notation Vector arithmetic – addition, subtraction and multiplication by scalar Vectors and translations 	<ul style="list-style-type: none"> Use ratios, including mixed units Fractions in ratios Fractions from ratios Combining ratios Unit pricing (‘best buys’) Currency conversions Convert fractions, decimals and percentages Find percentages and percentage changes Find one number as a percentage of another Calculate simple and compound interest Evaluate exponential change e.g. depreciation Find original values Review of single event probability – comparing theoretical and experimental Understand and work with mutually exclusive 	<ul style="list-style-type: none"> Understand sampling including the possible limitations Construct and interpret tables and line graphs for time data series Understand and represent with grouped data Understand and identify correlation Use lines of best fit, understanding the degrees of extrapolation Construct and interpret frequency polygons Evaluate measures of location and dispersion Use statistical diagrams and measures to compare distributions Use four operations with integers (positive and negative), 	<ul style="list-style-type: none"> Use factors, multiples and primes and prime factorisation Recognise arithmetic and geometric sequences Recognise and use other sequences Work out powers and roots Use the rule of indices Calculate with numbers in standard index form



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				<p>and independent events</p> <ul style="list-style-type: none"> • Construct and interpret tree diagrams • Find probabilities from frequency trees, tables and Venn diagrams 	<p>decimals and fractions with and without context (include all areas of previous study)</p> <ul style="list-style-type: none"> • Work with exact answers e.g. area and volume • Evaluate calculations involving percentages 	
Key Questions						
Assessment	Baseline assessment Mini unit test	Mini unit test	Mini unit test	Mini unit test	Mini unit test	Mini unit test End of year full PPE
Literacy/Numeracy/ SMSC/Character						