

YEAR 8 - MATHS – CURRICULUM OVERVIEW 2020/21

TOPIC TITLE	TOPIC OVERVIEW	KNOWLEDGE & SKILLS	ASSESSMENT	WIDER LINKS
<p>YEAR 8 Term 1:</p>	<p>Block 1: Ratio and Scale</p> <p>Block 2: Multiplicative Change</p> <p>Block 3: Multiplying and dividing fractions</p> <p>Block 4: Working in the Cartesian plane</p> <p>Block 5: Representing data</p> <p>Block 6: Probability</p>	<p>Key skills</p> <ul style="list-style-type: none"> • Understand ratio and its link to multiplication • Circumference of a circle • Use ratio notation • Reduce ratios to simplest form • Solve ratio problems <p>Key skills</p> <ul style="list-style-type: none"> • Use scale factors, linking to ratio, to solve simple direct proportion problems • Scale diagrams and maps <p>Key skills</p> <ul style="list-style-type: none"> • Multiplying and dividing a fraction by an integer • Multiplying and dividing a fraction by a fraction <p>Key skills</p> <ul style="list-style-type: none"> • Plotting and interpreting straight line graphs • Equations of lines parallel to the axes • Model situations by translating them to expressions, formulae and graphs <p>Key skills</p> <ul style="list-style-type: none"> • Scatter graphs and correlation • Designing and using one and two-way tables • Listing outcomes <p>Key skills</p> <ul style="list-style-type: none"> • Using sample space diagrams • Using tables 	<p>Quizzes will take place at the end of each block.</p> <p>HW tasks are built to coincide with blocks and test understanding.</p> <p>Assessment will take place at the end of the term covering all topics learnt.</p>	<p>Link to y7; Revisit area Revisit equations Revisit add/subtract fractions Revisit drawing angles Revisit Negatives Revisit Venn Diagrams</p> <p>Geography Maps Art scale drawing</p>
<p>YEAR 8 Term 2:</p>	<p>Block 1: brackets, equations and inequalities</p>	<p>Key skills</p> <ul style="list-style-type: none"> • Multiplying out single brackets • Forming and using expressions, formulae and identities • Forming and solving equations and inequalities with and without brackets 	<p>Quizzes will take place at the end of each block.</p> <p>HW tasks are built to coincide with blocks and test understanding.</p>	<p>Links to year 7: Revisit formal methods for calculations.</p>

	<p>Block 2: sequences</p> <p>Block 3: Indices</p> <p>Block 4: Fractions and percentages</p> <p>Block 5: Standard index form</p> <p>Block 6: Number sense</p>	<p>Key skills</p> <ul style="list-style-type: none"> Using more complex rules <p>Key skills</p> <ul style="list-style-type: none"> Writing expressions with powers <p>Key skills</p> <ul style="list-style-type: none"> Revisit fraction, decimal and percentage equivalence One number as a percentage of another <p>Key skills</p> <ul style="list-style-type: none"> Conversion between numbers in ordinary and standard form Comparing standard form <p>Key skills</p> <ul style="list-style-type: none"> Developing mental strategies Measures and units Estimation, including rounding to a given number of decimal places Revisit order of operations 	<p>Assessment will take place at the end of the term covering all topics learnt.</p>	<p>Interleaving; Equations in context – shapes, angles, probability ratio</p> <p>Scientific notation</p> <p>Tech: measuring and unit conversion</p>
<p>YEAR 8 Term 3:</p>	<p>Block 1: Angles in parallel lines and polygons</p> <p>Block 2: Area of trapezia and circles</p>	<p>Key skills</p> <ul style="list-style-type: none"> Review Y7 angle rules parallel lines and angles revisit geometric notation Angles in special quadrilaterals <p>Key skills</p> <ul style="list-style-type: none"> Review area of shapes covered in year 7 Area of a trapezium Area of a circle and parts of a circle Using significant figures Area of compound shapes 	<p>Quizzes will take place at the end of each block.</p> <p>HW tasks are built to coincide with blocks and test understanding.</p> <p>Assessment will take place at the end of the term covering all topics learnt.</p>	<p>Links to year 7: Revisit fractions Revisit shape properties</p> <p>Links to prior Y8: Revisit equation of line</p> <p>Interleaving: Use algebraic substitution to form lists for averages and range. Data collection in other areas.</p>

	<p>Block 3: Line symmetry and reflection</p> <p>Block 4: The data handling cycle</p> <p>Block 5: Measures of location and dispersion</p>	<p>Key skills</p> <ul style="list-style-type: none"> • Line symmetry in polygons and other shapes • Reflections of shapes in horizontal, vertical and diagonal lines. <p>Key skills</p> <ul style="list-style-type: none"> • Collecting data • Interpreting statistical diagrams • Dual bar charts • Constructing and interpreting pie charts <p>Key skills</p> <ul style="list-style-type: none"> • Median and mean revisited, including total. • Mean for grouped data • The mode • Choosing the appropriate average • Revisit finding the range • Comparing distributions 		
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