

Maths Phase One Curriculum

Overview:

The maths curriculum has been developed to inspire our learners to become confident, resilient, lifelong mathematicians who recognise effort as the path to mastery. Our rationale is that, everyone can achieve in maths whereby teaching at all key stages is founded on the need to teach for understanding, rather than teaching mathematics procedurally. Our curriculum is accessible to all learners whereby the supporting schemes of learning take into account and build on prior learning whilst recognising some students will be able to move faster through the content than others. In Phase 1 the broad and balanced blocks of work have clear sequencing and high expectations. Topics are not taught in isolation but interleaved and applied in different contexts e.g. learners are expected to use algebra within geometry, decimals and fractions within probability. Maximum opportunities are then available to secure understanding and aid memory. We revisit and reinforce through spaced repetition homework, class work and cumulative assessments.

Content:

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	<p>Knowledge: Algebraic Thinking</p> <p>Skills:</p> <ul style="list-style-type: none"> • Sequences • Understanding and using algebraic notation • Equality and equivalence 	<p>Knowledge: Place Value and Proportion</p> <p>Skills:</p> <ul style="list-style-type: none"> • Place value and ordering integers and decimals • Fraction, decimal and percentage equivalence 	<p>Knowledge: Applications of Number</p> <p>Skills:</p> <ul style="list-style-type: none"> • Solving problems with addition and subtraction • Solving problems with multiplication and division 	<p>Knowledge: Directed Number Fractional Thinking</p> <p>Skills:</p> <ul style="list-style-type: none"> • Four operations with directed number • Addition and subtraction of fractions 	<p>Knowledge: Lines and Angles</p> <p>Skills:</p> <ul style="list-style-type: none"> • Constructing, measuring and using geometric notation • Developing geometric reasoning 	<p>Knowledge: Reasoning with Number</p> <p>Skills:</p> <ul style="list-style-type: none"> • Developing number sense • Sets and probability • Prime numbers and proof

<p style="text-align: center;">Year 8</p>	<p>Knowledge: Ratio and Scale Multiplicative Change Working in the Cartesian Plane</p> <p>Skills</p> <ul style="list-style-type: none"> • Solving ratio and direct proportion problems • Exploring conversion graphs • Exchanging between currencies • Similar shapes and scale drawings and maps • Multiplying and dividing fractions and using the reciprocal • Working with coordinates and linear functions 	<p>Knowledge: Representing Data Find Probabilities</p> <p>Skills</p> <ul style="list-style-type: none"> • Draw and interpret scatter graphs, sample spaces, Venn diagrams, frequency and two-way tables • Represent discrete and continuous data • Find probabilities using the methods above and the product rule to find possible outcomes 	<p>Knowledge: Algebraic brackets, Equations and Inequalities Sequences Indices</p> <p>Skills</p> <ul style="list-style-type: none"> • Forming and manipulating algebraic expressions • Solving equations and inequalities • Generating sequences • Applying four operations and exploring the laws of indices 	<p>Knowledge: Fractions and Percentages Standard Index Form Number Sense</p> <p>Skills</p> <ul style="list-style-type: none"> • Conversions • Calculating proportions of amounts • Increasing and decreasing with multipliers • Expressing one amount as a fraction or percentage of another • Working with numbers greater and less than 1 in standard form • Solve problems involving rounding, estimating and converting between metric units 	<p>Knowledge: Angles in Parallel Lines and Polygons</p> <p>Skills</p> <ul style="list-style-type: none"> • Investigating angles between parallel lines and the transversal, interior and exterior in polygons • Investigating properties of special quadrilaterals to find missing angles • Calculating areas and perimeters of trapezia, circles, and compound shapes • Applying line symmetry and reflection 	<p>Knowledge: The Data Handling Cycle Measures of Location</p>
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Who to contact about Phase One Maths:

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