

### Stage 7 Mathematics Curriculum Sequence

**Subject Intent:** For every learner to be confident and fluent mathematicians who enjoy and succeed in mathematics, leaving school with a solid foundation of mathematical skills, knowledge and understanding, primed for their chosen fields in the 21<sup>st</sup> century.

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Big idea/Theme	<p><b>Numbers and the number system</b></p> <ul style="list-style-type: none"> <li>• Solve problems using common factors and highest common factors</li> <li>• Exploring prime numbers</li> <li>• Solve problems using common multiples and lowest common multiples</li> <li>• Explore powers and roots</li> </ul>	<p><b>Checking, approximating and estimating</b></p> <ul style="list-style-type: none"> <li>• Explore ways of approximating numbers</li> <li>• Explore ways of checking answers</li> </ul>	<p><b>Investigating properties of shapes</b></p> <ul style="list-style-type: none"> <li>• Investigate the properties of 3D shapes</li> <li>• Explore quadrilaterals</li> <li>• Explore triangles</li> </ul>	<p><b>Patterns</b></p> <ul style="list-style-type: none"> <li>• Investigate number patterns</li> <li>• Explore number sequences</li> <li>• Explore sequences</li> </ul>	<p><b>Calculating fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• Calculate with fractions</li> <li>• Calculate with percentages</li> </ul>	<p><b>Mathematical movement</b></p> <ul style="list-style-type: none"> <li>• Explore lines on the coordinate grid</li> <li>• Use transformations to move shapes</li> <li>• Describe transformations</li> </ul>
Big Idea/Theme	<p><b>Calculating</b></p> <ul style="list-style-type: none"> <li>• Exploring place value</li> <li>• Exploring written methods of calculation</li> <li>• Calculating with decimals</li> <li>• Know and apply the correct order of operations</li> </ul>	<p><b>Counting and comparing</b></p> <ul style="list-style-type: none"> <li>• Comparing numbers</li> <li>• Ordering integers and decimals</li> <li>• Ordering fractions</li> <li>• Ordering integers, decimals and fractions (including mixed numbers)</li> </ul>	<p><b>Algebraic manipulation</b></p> <ul style="list-style-type: none"> <li>• Understand the vocabulary and notation of algebra</li> <li>• Manipulate algebraic expressions</li> <li>• Explore functions</li> <li>• Evaluate algebraic statements</li> </ul>	<p><b>Measuring space</b></p> <ul style="list-style-type: none"> <li>• Measure accurately</li> <li>• Convert between measures</li> <li>• Solve problems involving measurement</li> </ul>	<p><b>Solving equations and inequalities</b></p> <ul style="list-style-type: none"> <li>• Explore way of solving equations</li> <li>• Solve two-step equations</li> <li>• Solve three-step equations</li> </ul>	<p><b>Presentation of data</b></p> <ul style="list-style-type: none"> <li>• Explore types of data</li> <li>• Construct and interpret graphs</li> <li>• Select appropriate graphs and charts</li> </ul>

		<ul style="list-style-type: none"> <li>Using comparison symbols in algebraic contexts</li> </ul>				
Big idea/Theme		<b>Visualising and constructing</b> <ul style="list-style-type: none"> <li>Interpret geometrical conventions and notation</li> <li>Apply geometrical conventions and notation</li> </ul>	<b>Exploring fractions, decimals and percentages</b> <ul style="list-style-type: none"> <li>Understand and use top-heavy fractions</li> <li>Understand the meaning of 'percentage'</li> <li>Explore links between fractions and percentages</li> </ul>	<b>Investigating angles</b> <ul style="list-style-type: none"> <li>Investigate angles</li> </ul>	<b>Calculating space</b> <ul style="list-style-type: none"> <li>Develop knowledge of area</li> <li>Investigate surface area</li> <li>Explore volume</li> </ul>	<b>Measuring data</b> <ul style="list-style-type: none"> <li>Investigate averages</li> <li>Explore ways of summarising data</li> <li>Analyse and compare sets of data</li> </ul>
Big idea/Theme			<b>Proportional reasoning</b> <ul style="list-style-type: none"> <li>Understand and use ratio notation</li> <li>Solve problems that involve dividing in a ratio</li> </ul>			
Knowledge that needs to stick	<b>Numbers and the number system</b> <ul style="list-style-type: none"> <li>Know the first 6 cube numbers</li> <li>Know the first 12 triangular numbers</li> <li>Know how to find multiples and factors</li> <li>Know how to find LCM and HCF</li> </ul>	<b>Checking, approximating and estimating</b> <ul style="list-style-type: none"> <li>Check calculations using approximation, estimation or inverse operations</li> </ul>	<b>Investigating properties of shapes</b> <ul style="list-style-type: none"> <li>Know the meaning of faces, edges and vertices</li> <li>Know the names of special triangles and quadrilaterals</li> <li>Understand and use geometric</li> </ul>	<b>Patterns</b> <ul style="list-style-type: none"> <li>Know basic algebraic notation</li> <li>Substitute numbers into formulae</li> <li>Write patterns and sequences</li> <li>Describe patterns and sequences</li> </ul>	<b>Calculating fractions, decimals and percentages</b> <ul style="list-style-type: none"> <li>Write a quantity as a fraction or percentage of another</li> <li>Use multiplicative reasoning to interpret percentage change</li> </ul>	<b>Mathematical movement</b> <ul style="list-style-type: none"> <li>Understand and use lines parallel to the axes, <math>y = x</math> and <math>y = -x</math></li> <li>Know how to transform shapes</li> <li>Know how to describe transformations</li> </ul>

	<ul style="list-style-type: none"> <li>• Use positive integer powers and associated real roots</li> </ul>		<p>notation for labelling angles, lengths, equal lengths and parallel lines</p>		<ul style="list-style-type: none"> <li>• Add, subtract, multiply and divide with fractions and mixed numbers</li> </ul>	
Knowledge that needs to stick	<p><b>Calculating</b></p> <ul style="list-style-type: none"> <li>• Know the order of operations including brackets</li> <li>• Apply the four operations with decimal numbers</li> </ul>	<p><b>Counting and comparing</b></p> <ul style="list-style-type: none"> <li>• Know the symbols =, ≠, &lt;, &gt;, ≤, ≥</li> <li>• Order integers, percentages, decimals and fractions</li> </ul>	<p><b>Algebraic manipulation</b></p> <ul style="list-style-type: none"> <li>• Know the order of operations including brackets</li> <li>• Know basic algebraic notation</li> <li>• Simplify and manipulate expressions by collecting like terms</li> <li>• Simplify and manipulate expressions by multiplying a single term over a bracket</li> <li>• Substitute numbers into formulae</li> </ul>	<p><b>Measuring space</b></p> <ul style="list-style-type: none"> <li>• Measure accurately</li> <li>• Convert between metric measurements</li> <li>• Convert between measure of time</li> </ul>	<p><b>Solving equations and inequalities</b></p> <ul style="list-style-type: none"> <li>• Know the order of operations including brackets</li> <li>• Simplify and manipulate expressions by collecting like terms</li> <li>• Simplify and manipulate expressions by multiplying a single term over a bracket</li> <li>• Solve linear equations in one unknown</li> </ul>	<p><b>Presentation of data</b></p> <ul style="list-style-type: none"> <li>• Use and interpret a range of charts and diagrams</li> <li>• Draw a range of charts and diagrams</li> </ul>
Knowledge that needs to stick		<p><b>Visualising and constructing</b></p> <ul style="list-style-type: none"> <li>• Know the meaning of faces, edges and vertices</li> <li>• Know the names of special triangles and quadrilaterals</li> </ul>	<p><b>Exploring fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• Write a quantity as a fraction or percentage of another</li> </ul>	<p><b>Investigating angles</b></p> <ul style="list-style-type: none"> <li>• Measure and draw angles</li> <li>• Find missing angles at a point and on a line</li> </ul>	<p><b>Calculating space</b></p> <ul style="list-style-type: none"> <li>• Know that area of a rectangle = <math>l \times w</math></li> <li>• Know that area of a triangle = <math>b \times h \div 2</math></li> </ul>	<p><b>Measuring data</b></p> <ul style="list-style-type: none"> <li>• Know how to work out measures of central tendency</li> <li>• Know how to calculate the range</li> </ul>



	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Address misconceptions</li> <li>• Exit tickets</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Address misconceptions</li> <li>• Exit tickets</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Address misconceptions</li> <li>• Exit tickets</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Address misconceptions</li> <li>• Exit tickets</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Address misconceptions</li> <li>• Exit tickets</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Address misconceptions</li> <li>• Exit tickets</li> </ul>
		<ul style="list-style-type: none"> <li>• Assessment in class assessment, with multiple choice and longer questions</li> </ul>		<ul style="list-style-type: none"> <li>• Assessment in class assessment, with multiple choice and longer questions</li> </ul>		<ul style="list-style-type: none"> <li>• End of year assessment using a foundation GCSE Paper</li> </ul>
Links to key stage 2/ prior knowledge needed	<p><b>Numbers and the number system</b></p> <ul style="list-style-type: none"> <li>• Know how to find common multiples of two given numbers</li> <li>• Know how to find common factors of two given numbers</li> <li>• Recall multiplication facts to <math>12 \times 12</math> and associated division facts</li> </ul>	<p><b>Checking, approximating and estimating</b></p> <ul style="list-style-type: none"> <li>• Approximate any number by rounding to the nearest 10, 100 or 1000, 10 000, 100 000 or 1 000 000</li> <li>• Approximate any number with one or two decimal places by rounding to the nearest whole number</li> <li>• Approximate any number with two decimal places by rounding to the one decimal place</li> <li>• Simplify a fraction by cancelling common factors</li> </ul>	<p><b>Investigating properties of shapes</b></p> <ul style="list-style-type: none"> <li>• Know the names of common 3D shapes</li> <li>• Know the meaning of face, edge, vertex</li> <li>• Understand the principle of a net</li> <li>• Know the names of special triangles</li> <li>• Know the names of special quadrilaterals</li> <li>• Know the meaning of parallel, perpendicular</li> <li>• Know the notation for equal</li> </ul>	<p><b>Patterns</b></p> <ul style="list-style-type: none"> <li>• Know the vocabulary of sequences</li> <li>• Find the next term in a linear sequence</li> <li>• Find a missing term in a linear sequence</li> <li>• Generate a linear sequence from its description</li> </ul>	<p><b>Calculating fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• Add and subtract fractions with different denominators</li> <li>• Add and subtract mixed numbers with different denominators</li> <li>• Multiply a proper fraction by a proper fraction</li> <li>• Divide a proper fraction by a whole number</li> <li>• Simplify the answer to a calculation when appropriate</li> <li>• Use non-calculator methods</li> </ul>	<p><b>Mathematical movement</b></p> <ul style="list-style-type: none"> <li>• Work with coordinates in all four quadrants</li> <li>• Carry out a reflection in a given vertical or horizontal mirror line</li> <li>• Carry out a translation</li> </ul>

			sides, parallel sides, right angles		to find a percentage of an amount • Convert between fractions, decimals and percentages	
Links to key stage 2/ prior knowledge needed	<b>Calculating</b> <ul style="list-style-type: none"> <li>• Fluently recall multiplication facts up to <math>12 \times 12</math></li> <li>• Fluently apply multiplication facts when carrying out division</li> <li>• Know the formal written method of long multiplication</li> <li>• Know the formal written method of short division</li> <li>• Know the formal written method of long division</li> <li>• Convert between an improper fraction and a mixed number</li> </ul>	<b>Counting and comparing</b> <ul style="list-style-type: none"> <li>• Understand that negative numbers are numbers less than zero</li> <li>• Order a set of decimals with a mixed number of decimal places (up to a maximum of three)</li> <li>• Order fractions where the denominators are multiples of each other</li> <li>• Order fractions where the numerator is greater than 1</li> <li>• Know how to simplify a fraction by cancelling common factors</li> </ul>	<b>Algebraic manipulation</b> <ul style="list-style-type: none"> <li>• Understand the vocabulary and notation of algebra</li> <li>• Manipulate algebraic expressions</li> <li>• Explore functions</li> <li>• Evaluate algebraic statements</li> </ul>	<b>Measuring space</b> <ul style="list-style-type: none"> <li>• Convert between metric units</li> <li>• Use decimal notation up to three decimal places when converting metric units</li> <li>• Convert between common Imperial units; e.g. feet and inches, pounds and ounces, pints and gallons</li> <li>• Convert between units of time</li> <li>• Use 12- and 24-hour clocks, both analogue and digital</li> </ul>	<b>Solving equations and inequalities</b> <ul style="list-style-type: none"> <li>• Know the basic rules of algebraic notation</li> <li>• Express missing number problems algebraically</li> <li>• Solve missing number problems expressed algebraically</li> </ul>	<b>Presentation of data</b> <ul style="list-style-type: none"> <li>• Construct and interpret a pictogram</li> <li>• Construct and interpret a bar chart</li> <li>• Construct and interpret a line graph</li> <li>• Understand that pie charts are used to show proportions</li> <li>• Use a template to construct a pie chart by scaling frequencies</li> </ul>

<p>Links to key stage 2/ prior knowledge needed</p>		<p><b>Visualising and constructing</b></p> <ul style="list-style-type: none"> <li>• Use a ruler to measure and draw lengths to the nearest millimetre</li> <li>• Use a protractor to measure and draw angles to the nearest degree</li> </ul>	<p><b>Exploring fractions, decimals and percentages</b></p> <ul style="list-style-type: none"> <li>• Understand the concept of a fraction as a proportion</li> <li>• Understand the concept of equivalent fractions</li> <li>• Understand the concept of equivalence between fractions and percentages</li> </ul>	<p><b>Investigating angles</b></p> <ul style="list-style-type: none"> <li>• Identify angles that meet at a point</li> <li>• Identify angles that meet at a point on a line</li> <li>• Identify vertically opposite angles</li> <li>• Know that vertically opposite angles are equal</li> </ul>	<p><b>Calculating space</b></p> <ul style="list-style-type: none"> <li>• Understand the meaning of area, perimeter, volume and capacity</li> <li>• Know how to calculate areas of rectangles, parallelograms and triangles using the standard formulae</li> <li>• Know that the area of a triangle is given by the formula <math>\text{area} = \frac{1}{2} \times \text{base} \times \text{height} = \text{base} \times \text{height} \div 2 = bh/2</math></li> <li>• Know appropriate metric units for measuring area and volume</li> </ul>	<p><b>Measuring data</b></p> <ul style="list-style-type: none"> <li>• Understand the meaning of 'average' as a typicality (or location)</li> <li>• Calculate the mean of a set of data</li> </ul>
<p>Links to key stage 2/ prior knowledge needed</p>			<p><b>Proportional reasoning</b></p> <ul style="list-style-type: none"> <li>• Find common factors of pairs of numbers</li> <li>• Convert between standard metric units of measurement</li> <li>• Convert between units of time</li> </ul>			

			<ul style="list-style-type: none"> <li>• Recall multiplication facts for multiplication tables up to <math>12 \times 12</math></li> <li>• Recall division facts for multiplication tables up to <math>12 \times 12</math></li> <li>• Solve comparison problems</li> </ul>			
Skill set development	<p>Communication Independence</p> <p>Teamwork</p> <p>Construct logical arguments</p> <p>Critical thinking</p> <p>Problem solving</p> <p>Generalisation</p> <p>Analytical thinking</p> <p>Quantitative reasoning</p> <p>Time management</p> <p>Reading comprehension</p> <p>Active learning</p> <p>Inductive reasoning</p> <p>Interpret and apply outcomes</p> <p>Communicate effectively</p> <p>Explain the meaning of that answer</p>	<p>Communication Independence</p> <p>Teamwork</p> <p>Construct logical arguments</p> <p>Critical thinking</p> <p>Problem solving</p> <p>Generalisation</p> <p>Analytical thinking</p> <p>Quantitative reasoning</p> <p>Time management</p> <p>Reading comprehension</p> <p>Active learning</p> <p>Inductive reasoning</p> <p>Interpret and apply outcomes</p> <p>Communicate effectively</p> <p>Explain the meaning of that answer</p>	<p>Communication Independence</p> <p>Teamwork</p> <p>Construct logical arguments</p> <p>Critical thinking</p> <p>Problem solving</p> <p>Generalisation</p> <p>Analytical thinking</p> <p>Quantitative reasoning</p> <p>Time management</p> <p>Reading comprehension</p> <p>Active learning</p> <p>Inductive reasoning</p> <p>Interpret and apply outcomes</p> <p>Communicate effectively</p> <p>Explain the meaning of that answer</p>	<p>Communication Independence</p> <p>Teamwork</p> <p>Construct logical arguments</p> <p>Critical thinking</p> <p>Problem solving</p> <p>Generalisation</p> <p>Analytical thinking</p> <p>Quantitative reasoning</p> <p>Time management</p> <p>Reading comprehension</p> <p>Active learning</p> <p>Inductive reasoning</p> <p>Interpret and apply outcomes</p> <p>Communicate effectively</p> <p>Explain the meaning of that answer</p>	<p>Communication Independence</p> <p>Teamwork</p> <p>Construct logical arguments</p> <p>Critical thinking</p> <p>Problem solving</p> <p>Generalisation</p> <p>Analytical thinking</p> <p>Quantitative reasoning</p> <p>Time management</p> <p>Reading comprehension</p> <p>Active learning</p> <p>Inductive reasoning</p> <p>Interpret and apply outcomes</p> <p>Communicate effectively</p> <p>Explain the meaning of that answer</p>	<p>Communication Independence</p> <p>Teamwork</p> <p>Construct logical arguments</p> <p>Critical thinking</p> <p>Problem solving</p> <p>Generalisation</p> <p>Analytical thinking</p> <p>Quantitative reasoning</p> <p>Time management</p> <p>Reading comprehension</p> <p>Active learning</p> <p>Inductive reasoning</p> <p>Interpret and apply outcomes</p> <p>Communicate effectively</p> <p>Explain the meaning of that answer</p>



	<p>Explain any assumptions made Link problems and solutions to the real world Mathematical reasoning Number structure Number notation Estimating Number sense Number facility</p>	<p>Explain any assumptions made Models and representations Scaling Spatial sense Measurement Pattern spotting Estimating Number sense</p>	<p>Explain any assumptions made Models and representations Mathematical reasoning Algebraic notation Classification Ability to manipulate Spatial sense Measurement Information ordering</p>	<p>Explain any assumptions made Models and representations Ability to manipulate Construct logical arguments and expose illogical arguments Measurement Pattern spotting Estimating Number sense</p>	<p>Explain any assumptions made Link problems and solutions to the real world Algebraic notation Classification Ability to manipulate Spatial sense Measurement Pattern spotting Number sense Number facility</p>	<p>Explain any assumptions made  Mathematical reasoning Scaling Classification Construct logical arguments Spatial sense Information ordering</p>
<p>Key Vocabulary (Tier 2/Tier 3)</p>	<p><b>Numbers and the number system</b> (Lowest) common multiple and LCM (Highest) common factor and HCF Power (Square and cube) root Triangular number Square number Cube number Prime number Linear sequence Arithmetic sequence</p>	<p><b>Checking, approximating and estimating</b> Approximate Round Decimal place Check Solution Answer Estimate Order of magnitude Accurate Accuracy Significant figure Cancel Inverse Operation</p>	<p><b>Investigating properties of shapes</b> Face Edge Vertex (vertices) Cube Cuboid Prism Cylinder Pyramid Cone Sphere Quadrilateral Square Rectangle Parallelogram (Isosceles) Trapezium</p>	<p><b>Patterns</b> Pattern Sequence Linear Term Term-to-term rule Ascending Descending</p>	<p><b>Calculating fractions, decimals and percentages</b> Mixed number Equivalent fraction Simplify Cancel lowest terms Proper fraction improper fraction top-heavy fraction vulgar fraction Percent percentage Multiplier Increase decrease</p>	<p><b>Mathematical movement</b> Coordinates Axis (axes) x-axis y-axis Origin Quadrant Translation Reflection Rotation Transformation Object Image Congruent congruence Mirror line Vector Centre of rotation</p>

			Kite Rhombus Delta Arrowhead Diagonal Perpendicular Parallel Triangle Scalene Right-angled Isosceles Equilateral			
Key Vocabulary (Tier 2/Tier 3)	<b>Calculating</b> Improper fraction Top-heavy fraction Mixed number Operation Inverse Long multiplication Short division Long division Remainder	<b>Counting and comparing</b> Positive number Negative number Integer Numerator Denominator	<b>Algebraic manipulation</b> Algebra Expression Term Formula (formulae) Equation Function Variable Mapping diagram Input Output Represent Substitute Evaluate Like terms Simplify Collect	<b>Measuring space</b> Length Distance Mass Weight Volume Capacity Metre Centimetre Millimetre Tonne Kilogram Gram Milligram Litre Millilitre Hour Minute Second Inch Foot	<b>Solving equations and inequalities</b> Algebra Algebraic, Algebraically Unknown Equation Operation Solve Solution Brackets Symbol Substitute	<b>Presentation of data</b> Data Categorical data Discrete data Pictogram Symbol Key Frequency Table Frequency table Tally Bar chart Time graph Time series Bar-line graph Vertical line chart Scale Graph Axis (axes) Line graph

				Yard Pound Ounce Pint Gallon Line segment		Pie chart Sector Angle Maximum Minimum
Key Vocabulary (Tier 2/Tier 3)		<b>Visualising and constructing</b> Edge Face Vertex (vertices) Plane Parallel Perpendicular Regular polygon Rotational symmetry	<b>Exploring fractions, decimals and percentages</b> Fraction Improper fraction Proper fraction Vulgar fraction Top-heavy fraction Percentage Proportion	<b>Investigating angles</b> Angle Degrees Right angle Acute angle Obtuse angle Reflex angle Protractor Vertically opposite Geometry Geometrical	<b>Calculating space</b> Perimeter Area Volume Capacity Surface area Square Rectangle Parallelogram Triangle Trapezium (trapezia) Polygon Cube Cuboid Square millimetre Square centimetre Square metre Square kilometre Cubic centimetre Centimetre cube Formula (formulae) Length Breadth Depth Height Width	<b>Measuring data</b> Average Spread Consistency Mean Median Mode Range Measure Data Statistic Statistics Approximate Round

Key Vocabulary (Tier 2/Tier 3)			<b>Proportional reasoning</b> Ratio Proportion Compare Comparison Part Simplify Common factor Cancel Lowest terms Unit			
Reading and Oracy	Students need to be able read, speak and think in mathematical language, identifying key concepts and processes of the wordier questions. Teachers will improve students' verbal communication skills, to enable them to show their understanding of mathematics accurately. Common strategies within lessons are: <ul style="list-style-type: none"> <li>- giving students sufficient time to read and process information from wordier questions</li> <li>- asking open questions</li> <li>- expanding and justifying answers</li> <li>- repetition of a correctly modelled sentence, to practice oracy skills</li> <li>- using the correct vocabulary and terms within discussions</li> <li>- referring to definitions and meanings when using tier 2 and 3 mathematical vocabulary</li> <li>- addressing common misconceptions</li> </ul>					
Numeracy	Addition Decimals Division Estimation, approximation and rounding Fractions Money Multiplication Numbers and concepts	Area Surface area and volume Cartesian coordinate Estimation, approximation and rounding Geometry Measurement Net of 3D solids	Algebra Area Surface area and volume Arithmetic Equations Geometry Net of 3D solids Perimeter and circumference Polygons	Angles Area Surface area and volume Equations Geometry Measurement Net of 3D solids Perimeter and circumference	Area Surface area and volume Cartesian coordinate Equations Perimeter and circumference Properties of polygons Real-World Maths	Averages: Mean, Median and Mode Data, graphs and charts Geometry Multivariate analysis Probability Real-World Maths Shapes and solids Transformations

	<p>Numbers</p> <p>Order of operations</p> <p>Percentages</p> <p>Positive and negative numbers</p> <p>Ratio and proportion</p> <p>Subtraction</p>	<p>Polygons</p> <p>Properties of polygons</p> <p>Shapes and solids</p>	<p>Properties of polygons</p> <p>Real-world maths</p> <p>Shapes and solids</p> <p>Solids</p> <p>Systems of measurement</p> <p>Transformations</p>	<p>Properties of polygons</p> <p>Shapes and solids</p> <p>Systems of measurement</p> <p>Time</p>	<p>Shapes and solids</p> <p>Solids</p> <p>Simultaneous equations</p> <p>Substitution</p> <p>Symbols</p>	<p>Types of data</p>
<b>Opportunities</b>						
<p>Careers</p>	<p>People who are good with numbers could have a career in any of the examples below, although this list is not exhaustive:</p> <p>Accountancy</p> <p>Economist</p> <p>Computer research scientist</p> <p>Software developer</p> <p>Computer and information research scientists</p> <p>Market research Analyst</p> <p>Statistician</p> <p>Microbiologists</p> <p>Engineering</p> <p>Maths teacher</p> <p>Quantity Surveyor</p>	<p>People who are good with numbers could have a career in any of the examples below, although this list is not exhaustive:</p> <p>Accountancy</p> <p>Economist</p> <p>Computer research scientist</p> <p>Software developer</p> <p>Computer and information research scientists</p> <p>Market research Analyst</p> <p>Statistician</p> <p>Microbiologists</p> <p>Engineering</p> <p>Maths teacher</p> <p>Quantity Surveyor</p>	<p>People who are good with Cartesian planes could have a career in any of the examples below, although this list is not exhaustive:</p> <p>Administrative managers</p> <p>Computer and information systems managers</p> <p>Engineering and natural sciences</p> <p>Farmers</p> <p>Financial</p> <p>Funeral directors</p> <p>Medical and health services</p> <p>Politics</p> <p>Engineers</p> <p>Actuaries</p> <p>Human resources</p>	<p>People who are good with geometry could have a career in any of the examples below, although this list is not exhaustive:</p> <p>Animators</p> <p>Fashion Designer</p> <p>Maths teacher</p> <p>Plumber</p> <p>CAD Engineer</p> <p>Game developer</p> <p>Interior designer</p> <p>Surveyor</p> <p>City Planner</p> <p>Construction Worker</p> <p>Cartographer</p> <p>Mathematician</p> <p>Mechanical Engineer</p> <p>Robotics Engineer</p>	<p>People who are good with geometry could have a career in any of the examples below, although this list is not exhaustive:</p> <p>Dentists</p> <p>Doctors</p> <p>Nurses</p> <p>Pharmacies</p> <p>Firefighters</p> <p>Chefs</p> <p>Retail</p> <p>Estate agents</p> <p>Architects</p> <p>Surveyors</p> <p>Computer programmers</p> <p>Computer software engineers</p> <p>Farming</p>	<p>People who are good with data could have a career in any of the examples below, although this list is not exhaustive:</p> <p>Administrative managers</p> <p>Computer and information systems managers</p> <p>Engineering and natural sciences</p> <p>Farmers</p> <p>Financial</p> <p>Funeral directors</p> <p>Medical and health services</p> <p>Politics</p> <p>Engineers</p> <p>Actuaries</p> <p>Human resources</p> <p>Payroll</p>

			Payroll Stock clerks Order fillers Data entry and information processing workers	Architect	Electrical and electronics installers and repairers Construction Glaziers Painters and decorators Plumbers Gas fitters Retail Stock clerks	Stock clerks Order fillers Data entry and information processing workers
SMSC including British Values, Culture and Diversity	<p>The mathematics curriculum helps prepare pupils for life in a modern Britain by developing their personal qualities and social skills with the chance to discuss, argue and challenge other people’s ideas in a safe environment. Everyone is encouraged to express their own personal views on the mathematical topics. Alongside everyone learning how to be accepting of other people’s views, students gain realisation that there is not always one route to an answer but several different ways.</p> <p><b>Spiritual</b> - pupils are encouraged to use their imagination and creativity to break problems down and solve them by thinking outside of the box.</p> <p><b>Moral</b> – pupils look at consequences and what happens if rules are not followed. Will an action to one number apply to all numbers?</p> <p><b>Social</b> – developing personal qualities and social skills. Being able to work with others, show perseverance, being able to ask for help and not being afraid to try something new.</p> <p><b>Cultural</b> – understanding others students’ views and being able to express their own views. Exploring problems from a range of cultures.</p>					
Relationship and Sex Education and Health Education	<p>The mathematics curriculum aims to provide pupils with the knowledge and understanding that will enable them to lead a happy, healthy and successful adult life. All pupils are supported to develop resilience, to know how and when to ask for help, and to know where to access support. This develops their capacity to make sound decisions when facing risks, challenges and complex contexts in their lives. Character traits such as perseverance and self-belief, together with personal attributes such as honesty, integrity, tolerance and kindness, will be actively cultivated and celebrated.</p>					