



# Curriculum Map



Subject: Mathematics

Year group: 7

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p><b>Content</b></p> <p><i>Declarative Knowledge – ‘Know What’</i></p>	<p><b>Algebraic Thinking</b> – Sequences Understanding and using algebraic notation Equality and Equivalence</p>	<p><b>Place Value and Proportion</b> Place value and ordering integers and decimals Fractions, decimals and percentage equivalence</p>	<p><b>Applications of Number</b> Solving problems with addition and subtraction Solving problems with multiplication and division Fractions and percentages of amounts</p>	<p><b>Directed Number / Fractional thinking</b> Four Operations with directed number Addition and subtraction of fractions</p>	<p><b>Line and Angles</b> Constructing, measuring and using geometric notation Developing geometric reasoning</p>	<p><b>Reasoning with Number</b> Sets and probability Prime numbers and proof</p>
<p><b>Skills</b></p> <p><i>Procedural Knowledge – ‘Know How’</i></p>	<ul style="list-style-type: none"> <li>Describe and continue sequences in diagrams and number forms, both linear and non-linear</li> <li>Using single function machines and series of two function machines with numbers, bar models and letters</li> <li>Forming and substituting into expressions, including generating sequences</li> <li>Representing functions graphically</li> <li>Understanding equality and fact families</li> <li>Forming and solving one-step equations</li> <li>Understanding equivalence</li> <li>Collecting like terms</li> </ul>	<ul style="list-style-type: none"> <li>Integer place value up to one billion</li> <li>Decimal place value to hundredths</li> <li>Working out and using number lines</li> <li>Comparing and ordering numbers</li> <li>The range and median</li> <li>Rounding positive powers of ten and to one significant figure</li> <li>Exploring and using standard index form</li> <li>Representing tenths and hundredths on diagrams and number lines</li> <li>Interchanging between fractions, decimals and percentages for multiples of tenths and quarters</li> <li>Interpreting pie charts</li> <li>Equivalent fractions</li> <li>Converting between any fraction, decimals and percentages.</li> </ul>	<ul style="list-style-type: none"> <li>Use formal methods of addition with integers and decimals</li> <li>Solve problems in the context of perimeter, money and frequency trees and tables</li> <li>Multiplying by 10, 100 and 1000; unit conversions</li> <li>Formal methods of multiplication and division</li> <li>HCF and LCM</li> <li>Areas of triangles, rectangles and parallelograms</li> <li>Finding the mean</li> <li>Finding fractions and percentages of amounts</li> <li>Solving two-step equations</li> <li>Introduction to the order of operations</li> </ul>	<ul style="list-style-type: none"> <li>Ordering directed numbers with and without context</li> <li>Revisit four operations to include directed number</li> <li>Using a calculator with directed number</li> <li>Order of operations</li> <li>Representing tenths and hundredths on diagrams and number lines</li> <li>Adding/subtracting fractions with common denominators, including with answers above one</li> <li>Revisit equivalent fractions</li> <li>Adding and subtracting fractions with simple different denominators</li> <li>Mixed questions</li> </ul>	<ul style="list-style-type: none"> <li>Drawing and measuring lines and angles using ruler and protractor</li> <li>Understanding and using notation for lines and angles</li> <li>Understand parallel and perpendicular</li> <li>Recognise types of triangles, quadrilaterals and other polygons</li> <li>Drawing triangles given SSS, SAS, ASA</li> <li>Drawing and interpreting pie charts</li> <li>Calculating using angles at a point, angles on a straight line and vertically opposite angles</li> <li>Calculating missing angles in triangles and quadrilaterals</li> <li>Addition in standard form</li> <li>Parallel lines rules</li> <li>Angles in polygons</li> </ul>	<ul style="list-style-type: none"> <li>Understanding and using set notations</li> <li>Venn diagrams</li> <li>Probability of single events</li> <li>Types of number, including prime factorisation</li> <li>Powers and roots</li> <li>Using counter examples.</li> <li>Venn diagrams for HCF and LCM</li> </ul>



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<b>Key Questions</b>	Can you explain what $x+2=6$ means?	Can you explain what $\frac{1}{5}$ means and why it can also be written as 20% and 0.2?	Do you know the formulae for finding the area of rectangles, parallelograms and triangles?	Can you explain why $\frac{8}{3}$ is the same as 2 and $\frac{2}{3}$ ?	Are you confident in using a protractor to measure angles?	Can you use Venn diagrams to answer questions on probability and prime factorisation?
<b>Assessment</b>	Baseline assessment Mini unit test	Mini unit test	Mini unit test	Mini unit test	Mini unit test	Mini unit test
<b>Literacy/Numeracy/ SMSC/Character</b>	Ridgeway 6					
<b>Blended Learning opportunities</b>						