

## What are the aims and intentions of this curriculum?

Term	Set 1, 2 and 3	Set 3/4	Set 5	Assessment
<b>Autumn 1</b>	<ul style="list-style-type: none"> <li>Identify and use the prime factorisation of a number</li> <li>Round numbers to an appropriate degree of accuracy</li> <li>Understand and use standard form</li> <li>To be able to add, subtract, multiply and divide with negative numbers</li> <li>To be able to apply the correct order of operations</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems with Prime Numbers</li> <li>Solve problems with Highest Common Factor and Lowest Common Multiple</li> <li>Explore powers and roots and number patterns</li> <li>To be able to compare and order numbers</li> <li>To be able to use written methods to multiply and divide</li> <li>To be able to apply the correct order of operations</li> </ul>	<ul style="list-style-type: none"> <li>Identify the value of each digit in numbers given to three decimal places</li> <li>multiply and divide numbers by 10, 100 and 1000</li> <li>Use negative numbers in context</li> <li>Identify common factors, common multiples and prime numbers</li> <li>Extend written multiplication methods</li> <li>Know and use the order of operations</li> <li>Solve problems involving addition, subtraction and multiplication</li> </ul>	Mini topic assessments after each section of work
<b>Autumn 2</b>	<ul style="list-style-type: none"> <li>To explore enlargement</li> <li>To use scale drawings and bearings</li> <li>To explore representations of 3D drawings</li> <li>To understand the language of probability</li> <li>To explore experiments and outcomes</li> <li>To be able to calculate probabilities</li> </ul>	<ul style="list-style-type: none"> <li>To be able to use conventional terms and notations</li> <li>To be able to recognise line and rotational symmetry</li> <li>To be able to draw diagrams from a written description</li> <li>Investigate the properties of 3D shapes</li> <li>Know the properties of triangles and quadrilaterals</li> <li>Apply the properties of triangles and quadrilaterals to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>Develop written methods of division</li> <li>Deal with remainders when carrying out division</li> <li>Solve problems involving division</li> <li>Construct lines and angles accurately</li> <li>Know and use the mathematical language of 3D shapes</li> <li>Explore the nets of 3D shapes</li> </ul>	Mini topic assessments after each section of work and a written assessment covering all the work completed so far.
<b>Spring 1</b>	<ul style="list-style-type: none"> <li>To be able to simplify expressions</li> <li>To be able to factorise expressions</li> <li>To be able to change the subject of a formula</li> <li>To understand the relationship between ratio and proportion</li> <li>To be able to solve problems involving proportional reasoning</li> <li>To be able to solve problems involving compound measures</li> </ul>	<ul style="list-style-type: none"> <li>To be able to simplify expressions</li> <li>To be able to expand a single bracket</li> <li>To understand how to use function machines</li> <li>To be able to convert between fractions and percentages</li> <li>To be able to simplify a ratio</li> <li>To be able to share in a ratio</li> </ul>	<ul style="list-style-type: none"> <li>To be able to identify properties of triangles and quadrilaterals</li> <li>To be able to use the angle sum of triangles and quadrilaterals to solve problems</li> <li>To be able to calculate the angle sums of regular polygons</li> <li>Explore the equivalence of fractions</li> <li>Apply the equivalence of fractions for comparing size</li> <li>Explore the equivalence between fractions, decimals and percentages</li> </ul>	Mini topic assessments after each section of work and a written assessment covering all the work completed so far.
<b>Spring 2</b>	<ul style="list-style-type: none"> <li>Generate terms of a sequence and find a general rule for a sequence</li> <li>Understand and use angle properties of parallel lines</li> <li>Explore the angle properties of regular polygons</li> <li>To be able to calculate percentage change</li> <li>To be able to calculate reverse percentages</li> <li>To be able to interpret fractions as numbers and operators</li> </ul>	<ul style="list-style-type: none"> <li>To measure lines and angles accurately</li> <li>To convert between metric units of length, mass and capacity</li> <li>To apply angle rules Apply the four operations to fractions</li> <li>Apply the four operations to mixed numbers and improper fractions</li> <li>Use the multiplier method for percentages</li> </ul>	<ul style="list-style-type: none"> <li>Add and subtract fractions with different denominators</li> <li>Apply multiplication and division to fractions</li> <li>Calculate percentages of quantities</li> <li>To solve missing number problems</li> <li>To explore area</li> <li>To investigate volume</li> </ul>	Mini topic assessments after each section of work
<b>Summer 1</b>	<ul style="list-style-type: none"> <li>To explore the area and circumference of circles</li> <li>To calculate the radius and diameter of circles</li> <li>To calculate volume of cylinders and area/perimeter of shapes related to circles</li> </ul>	<ul style="list-style-type: none"> <li>o solve one step equations</li> <li>To solve two step equations</li> <li>To solve three step equations</li> <li>To calculate area and perimeter of rectangles and triangles</li> <li>To calculate area of parallelograms and trapezia</li> <li>To calculate volume and surface area of cuboids</li> </ul>	<ul style="list-style-type: none"> <li>To calculate area of triangles and parallelograms</li> <li>To calculate volume of cuboids</li> <li>To convert units of area and volume</li> </ul>	Mini topic assessments after each section of work
<b>Summer 2</b>	<ul style="list-style-type: none"> <li>To plot and interpret linear graphs</li> <li>To plot and interpret quadratic graphs</li> <li>To model real situations using linear graphs</li> </ul>	<ul style="list-style-type: none"> <li>Draw and Describe Reflections</li> <li>Draw and Describe Rotations</li> <li>Draw and Describe Translations</li> <li>To be able to construct and complete frequency tables</li> <li>To be able to construct and interpret pictograms and bar charts</li> <li>To be able to construct pie charts</li> </ul>	<ul style="list-style-type: none"> <li>Use coordinates to describe the position of a point</li> <li>Draw points using coordinates</li> <li>Translate and Reflect shapes</li> </ul>	Mini topic assessments after each section of work. End of Year written assessments