

Mid-Year Expectations		End of Year Expectations
Higher Prior Attainer	<p><b>Algebraic Thinking.</b></p> <ul style="list-style-type: none"> <li>Students find missing numbers in a sequence.</li> </ul> <p><b>Place Value and Proportion.</b></p> <ul style="list-style-type: none"> <li>Students write multiples of 10 as powers of 10 including negative powers of 10.</li> <li>Students write positive integers and decimals in the form of <math>A \times 10^n</math>.</li> <li>Students complete conversions with more difficult fractions; eights and thousandths.</li> </ul> <p><b>Applications of Number.</b></p> <ul style="list-style-type: none"> <li>Students can multiply by 0.1 and 0.01.</li> </ul>	<p><b>Directed Number.</b></p> <ul style="list-style-type: none"> <li>Students understand positive numbers have more than one square root.</li> <li>Students work with higher powers and roots.</li> </ul> <p><b>Fractional thinking.</b></p> <ul style="list-style-type: none"> <li>Students add and subtract simple algebraic fractions.</li> </ul> <p><b>Reasoning with Number.</b></p> <ul style="list-style-type: none"> <li>Students use Venn Diagrams to calculate highest common factors and lowest common multiples.</li> <li>Students form and test conjectures using prime and other types of number.</li> </ul> <p><b>Lines and Angles. Find and use the angle sum of any polygon.</b></p> <ul style="list-style-type: none"> <li>Students use parallel line angle facts.</li> <li>Students obtain simple proofs.</li> </ul>



Mid-Year Expectations		End of Year Expectations
<p><b>Middle Prior Attainer</b></p>	<p><b>Algebraic Thinking.</b></p> <ul style="list-style-type: none"> <li>• Students recognise patterns in different types of sequences and use term-to-term rules.</li> <li>• Students form and simplify expressions using correct algebraic notation.</li> <li>• Substitute into expressions and functions.</li> <li>• Students draw straight-line graphs.</li> <li>• Students form and solve one-step linear equations.</li> <li>• Students understand differences between equivalence and equality.</li> </ul> <p><b>Place Value and Proportion.</b></p> <ul style="list-style-type: none"> <li>• Students use numbers to one billion and decimals to hundredths.</li> <li>• Students round numbers, including to one significant figure.</li> <li>• Students order numbers and compare using inequalities.</li> <li>• Students represent fractions diagrammatically and on number lines.</li> <li>• Students convert between fractions, decimals, and percentages.</li> <li>• Students work with fractions greater than one and their equivalent decimals and percentages.</li> </ul> <p><b>Applications of Number.</b></p> <ul style="list-style-type: none"> <li>• Students use formal methods of addition and subtraction, multiplication, and division and use to</li> <li>• Students form and solve equations.</li> <li>• Students calculate fractions and percentages of amounts.</li> </ul>	<p><b>Directed Number.</b></p> <ul style="list-style-type: none"> <li>• Students use directed numbers in all areas of arithmetic.</li> <li>• Students substitute directed numbers into algebraic formula and two-step equations.</li> </ul> <p><b>Fractional thinking.</b></p> <ul style="list-style-type: none"> <li>• Students add and subtract fractions including those with different denominators.</li> </ul> <p><b>Reasoning with Number.</b></p> <ul style="list-style-type: none"> <li>• Students simplify complex calculations and number facts and extend to algebraic facts.</li> <li>• Students use the equivalence of fractions, decimals, and percentages.</li> <li>• Students understand and use sets, set notation and listing strategies.</li> <li>• Students find highest common factors and lowest common multiplies using prime numbers.</li> <li>• Students form and test conjectures.</li> </ul> <p><b>Lines and Angles.</b></p> <ul style="list-style-type: none"> <li>• Students use rulers, protractors, and compasses to measure and construct shapes, applying such skills to the construction of pie charts.</li> <li>• Students understand and use mathematical notation for angles, lines of equal length and parallel lines.</li> <li>• Students name types of triangles, quadrilateral, and other polygons.</li> <li>• Students understand and use their different properties.</li> <li>• Students use chains of reasoning with angle facts.</li> </ul>



Mid-Year Expectations		End of Year Expectations
<p><b>Lower Prior Attainer</b></p>	<p><b>Algebraic Thinking.</b></p> <ul style="list-style-type: none"> <li>• Students recognise patterns in linear and non-linear sequences and use term-to-term rules.</li> <li>• Students use function machines to find outputs and inputs.</li> <li>• Students form and simplify expressions using correct algebraic notation, recognising like-terms.</li> <li>• Students substitute into expressions and functions.</li> <li>• Students form and solve one-step linear equations.</li> <li>• Students recognise coordinates.</li> <li>• Students use fact families to show equality and like terms so show equivalence.</li> </ul> <p><b>Place Value and Proportion.</b></p> <ul style="list-style-type: none"> <li>• Students use fact families to show equality and like terms so show equivalence.</li> <li>• Students order whole numbers and compare using inequality signs.</li> <li>• Students round numbers to the nearest 10, 100 and 1000.</li> <li>• Students represent fractions diagrammatically and on number lines.</li> <li>• Students understand links between fractions, decimals and percentages and use in conversions.</li> </ul> <p><b>Applications of Number.</b></p> <ul style="list-style-type: none"> <li>• Students use formal methods of addition and subtraction, multiplication, and division.</li> <li>• Students calculate fractions and percentages of amounts.</li> </ul>	<p><b>Directed Number.</b></p> <ul style="list-style-type: none"> <li>• Students use directed numbers in all areas of arithmetic.</li> <li>• Students substitute directed numbers into simple algebraic formula and equations.</li> </ul> <p><b>Fractional thinking.</b></p> <ul style="list-style-type: none"> <li>• Students add and subtract fractions when the denominator is the same.</li> </ul> <p><b>Reasoning with Number.</b></p> <ul style="list-style-type: none"> <li>• Students use the equivalence of simple fractions, decimals, and percentages.</li> <li>• Students use Venn diagrams and listing strategies,</li> <li>• Students find highest common factors and lowest common multiplies using prime numbers.</li> </ul> <p><b>Lines and Angles.</b></p> <ul style="list-style-type: none"> <li>• Students use rulers, protractors, and compasses to measure and construct shapes.</li> <li>• Students understand and use mathematical notation for angles, lines of equal length and parallel lines.</li> <li>• Students name types of triangles, quadrilateral, and other polygons.</li> <li>• Students use angle facts.</li> </ul>

