

Strand – Algebra					
Rationale					
Algebra is taught throughout school, starting with basic missing number problems to solving expressions where an unknown number is depicted with a symbol or letter. The strand can be seen as three sections: equations, formulae and sequences. Learning algebra is important as it helps to develop children’s critical thinking skills. This includes problem solving, logic, patterns and reasoning.					
Learning					
Equations					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><i>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$</i> (copied from Addition and Subtraction)</p>	<p><i>recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</i> (copied from Addition and Subtraction)</p>	<p><i>solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</i> (copied from Addition and Subtraction)</p>		<p><i>use the properties of rectangles to deduce related facts and find missing lengths and angles</i> (copied from Geometry: Properties of Shapes)</p>	<p>express missing number problems algebraically</p>
	<p><i>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</i> (copied from Addition and Subtraction)</p>	<p><i>solve problems, including missing number problems, involving multiplication and division, including integer scaling</i> (copied from Multiplication and Division)</p>			<p>find pairs of numbers that satisfy number sentences involving two unknowns</p>

<i>represent and use number bonds and related subtraction facts within 20 (copied from Addition and Subtraction)</i>					enumerate all possibilities of combinations of two variables
Formulae					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Perimeter can be expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit. (Copied from NSG measurement)		use simple formulae
					generate and describe linear number sequences
Sequences					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<i>sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening (copied from Measurement)</i>	<i>compare and sequence intervals of time (copied from Measurement)</i> <i>order and arrange combinations of mathematical objects in patterns (copied from Geometry: position and direction)</i>				generate and describe linear number sequences
Key Vocabulary					

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