

# PLACE VALUE

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Place Value: Counting</b>	<ul style="list-style-type: none"> <li>- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>- Count numbers to 100 in numerals; count in multiples of 2s, 5s and 10s</li> </ul> <p>Autumn 1, Spring 1, Summer 2</p>	<ul style="list-style-type: none"> <li>- Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</li> </ul> <p>Autumn 1, Spring 1</p>	<ul style="list-style-type: none"> <li>- Count in multiples of 6, 7, 9, 25 and 1000</li> <li>- Count backwards through zero to include negative numbers</li> </ul> <p>Autumn 1, Spring 1</p>	<ul style="list-style-type: none"> <li>- Count forwards or backwards in steps of powers of 10 for any given number up to one million</li> <li>- Count forwards and backwards with positive and negative whole numbers, including through zero</li> </ul> <p>Autumn 1,</p>	
<b>Place Value: Represent</b>	<ul style="list-style-type: none"> <li>- Identify and represent numbers using objects and pictorial representations</li> <li>- Read and write numbers to 100 in numerals</li> <li>- Read and write numbers from 1 to 20 in numerals and words</li> </ul> <p>Autumn 1, Spring 1, Summer 2</p>	<ul style="list-style-type: none"> <li>- Read and write numbers to at least 100 in numerals and in words</li> <li>- Identify, represent and estimate numbers using different representations, including the number line</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Identify, represent and estimate numbers using different representations</li> <li>- Read and write numbers up to 1000 in numerals and in words</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Identify, represent and estimate numbers using different representations</li> <li>- Read Roman Numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Read, write, (order and compare) numbers to at least one million and determine the value of each digit</li> <li>- Read Roman Numerals to 1000 (M) and recognise years written in Roman numerals</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Read, write, (order and compare) numbers up to ten million and determine the value of each digit</li> </ul> <p>Autumn 1</p>

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	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Place Value: Use PV and Compare</b>	<ul style="list-style-type: none"> <li>- Given a number, identify one more and one less</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Recognise the place value of each digit in a two-digit number (tens and ones)</li> <li>- Compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Recognise the place value of each digit in a three-digit number (hundreds, tens and ones)</li> <li>- Compare and order numbers up to 1000</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- Find 1000 more or less than a given number</li> <li>- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones)</li> <li>- Order and compare numbers beyond 1000</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- (Read, write) Order and compare numbers to at least one million and determine the value of each digit</li> </ul> <p>Autumn 1</p>	<ul style="list-style-type: none"> <li>- (Read, write) Order and compare numbers to at least ten million and determine the value of each digit</li> </ul> <p>Autumn 1</p>
<b>Place Value: Problems &amp; Rounding</b>		<ul style="list-style-type: none"> <li>- Use place value and number facts to solve problems</li> </ul> <p>Autumn 1, Autumn 2</p>	<ul style="list-style-type: none"> <li>- Solve number problems and practical problems involving these ideas</li> </ul> <p>Autumn 1, Autumn 2</p>	<ul style="list-style-type: none"> <li>- Round any number to the nearest 10, 100 or 1000</li> <li>- Solve number and practical problems that involve all of the above and with increasingly large numbers</li> </ul> <p>Autumn 1, Autumn 2</p>	<ul style="list-style-type: none"> <li>- Interpret negative numbers in context</li> <li>- Round any number up to one million to the nearest 10, 100, 1000, 10 000 and 100 000</li> <li>- Solve number problems and practical problems that involve all of the above</li> </ul> <p>Autumn 1, Autumn 2</p>	<ul style="list-style-type: none"> <li>- Round any whole number to a required degree of accuracy</li> <li>- Use negative numbers in context, and calculate intervals across zero</li> <li>- Solve number and practical problems that involve all of the above</li> </ul> <p>Autumn 1, Autumn 2</p>

# ADDITION AND SUBTRACTION

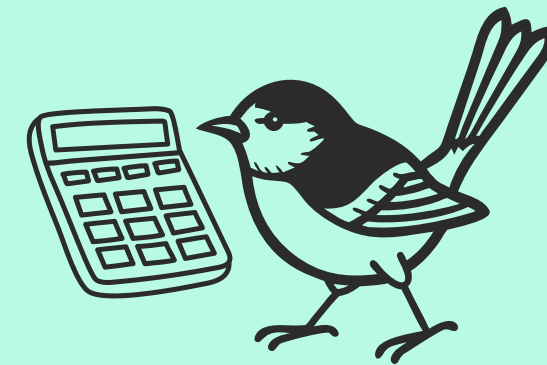
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Addition and Subtraction:</b> Recall, Represent, Use</p>	<ul style="list-style-type: none"> <li>- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</li> <li>- Represent and use number bonds and related subtraction facts within 20</li> </ul> <p>Autumn 2, Spring 1</p>	<ul style="list-style-type: none"> <li>- Recall and use addition and subtraction facts to 20 fluently, and use related facts up to 100</li> <li>- Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</li> </ul> <p>Autumn 2</p>	<ul style="list-style-type: none"> <li>- Estimate the answer to a calculation and use inverse operations to check answers</li> </ul> <p>Autumn 2</p>	<ul style="list-style-type: none"> <li>- Estimate and use inverse operations to check answers to a calculation</li> </ul> <p>Autumn 2</p>	<ul style="list-style-type: none"> <li>- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</li> </ul> <p>Autumn 2</p>	

# ADDITION AND SUBTRACTION

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition and Subtraction: Calculations	- Add and subtract one-digit and two-digit numbers to 20, including zero	- Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: > a two-digit number and ones > a two-digit number and tens > two two-digit numbers > adding three on-digit numbers	- Add and subtract numbers mentally, including: > a three-digit number and ones > a three-digit number and tens > a three-digit number and hundreds - Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	- Add and subtract numbers with up to four digits using formal written methods of columnar addition and subtraction where appropriate	- Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction) - Add and subtract numbers mentally with increasingly large numbers	- Perform mental calculations, including with mixed operations and large numbers - Use their knowledge of the order of operations to carry out calculations involving the four operations
	Autumn 2, Spring 1	Autumn 2	Autumn 2	Autumn 2	Autumn 2	Autumn 2

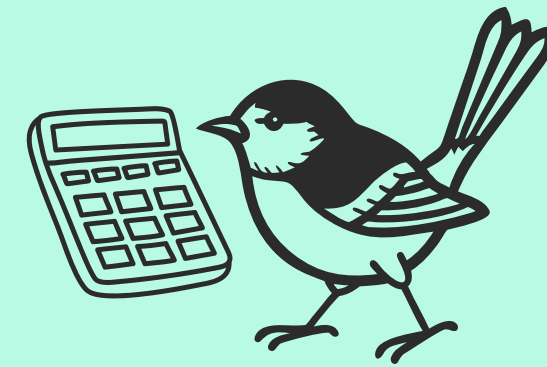
**ADDITION  
AND  
SUBTRACTION**

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Addition and Subtraction: Solve Problems</b>	<p>- Solve one-step problems that involve addition and subtractions, using concrete objects and pictorial representations, and missing number problems such as <math>7 = \quad - 9</math></p> <p>Autumn 2, Spring 1</p>	<p>- Solve problems with addition and subtraction:</p> <ul style="list-style-type: none"> <li>&gt; using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>&gt; applying their increasing knowledge of mental and written methods</li> </ul> <p>Autumn 2</p>	<p>- Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction</p> <p>Autumn 2</p>	<p>- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</p> <p>Autumn 2</p>	<p>- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>Autumn 2, Spring 1</p>	<p>- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>Autumn 2</p>

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Multiplication and Division: Recall, Represent, Use</b></p>		<ul style="list-style-type: none"> <li>- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>- Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</li> </ul>	<ul style="list-style-type: none"> <li>- Recall and use multiplication and division facts for the 2, 4, 8 and 11 multiplication tables</li> </ul>	<ul style="list-style-type: none"> <li>- Recall multiplication and division facts for multiplication tables up to 12 x 12</li> <li>- Use place value known and derived facts to multiply and divide mentally, including: multiplying and dividing by 1; multiplying by 0; multiplying together three numbers</li> <li>- Recognise and use factor pairs and commutativity in mental calculations</li> </ul>	<ul style="list-style-type: none"> <li>- Identify multiples and factors, including all factor pairs of a number, and common factors of two numbers</li> <li>- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</li> <li>- Establish whether a number up to 100 is prime and recall prime numbers up to 19</li> <li>- Recognise and use squared numbers and cube numbers, and the notation for each</li> </ul>	<ul style="list-style-type: none"> <li>- Identify common factors, common multiples and prime numbers</li> <li>- Use estimation to check answers to calculation and determine, in the context of a problem, an appropriate degree of accuracy</li> </ul>
		Spring 1	Spring 1	Spring 1	Autumn 2	Autumn 2

**MULTIPLICATION  
AND DIVISION**

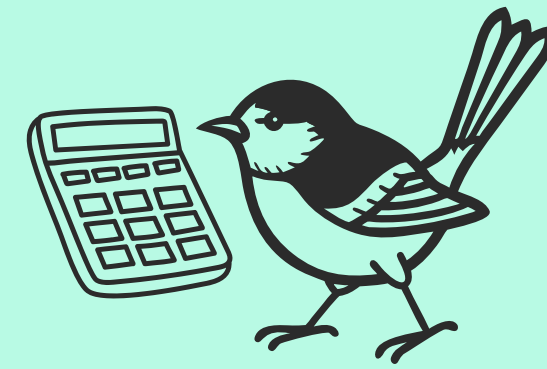
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Multiplication and Division: Calculations</b>		<ul style="list-style-type: none"> <li>- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs</li> </ul>	<ul style="list-style-type: none"> <li>- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progression to formal written methods</li> </ul>	<ul style="list-style-type: none"> <li>- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> </ul>	<ul style="list-style-type: none"> <li>- Multiply numbers up to four-digits by a one-digit number using a formal written method, including long multiplication to two-digit numbers</li> <li>- Multiply and divide numbers mentally drawing upon known facts</li> <li>- Divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context</li> <li>- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</li> </ul>	<ul style="list-style-type: none"> <li>- Multiply numbers up to four digits by a two-digit number using the formal written method of long multiplication</li> <li>- Divide numbers up to four digits by a two-digit numbers using the formal written method of long division and interpret remainders as whole number remainders, fractions or rounding appropriately for the context</li> <li>- Divide numbers up to four digits by a two-digit numbers using the formal written method of short division and interpret remainders appropriately for the context</li> <li>- Perform mental calculations, including with mixed operations and large numbers</li> </ul>
			Spring 1	Spring 1, Spring 2	Spring 1	Spring 1

**MULTIPLICATION  
AND DIVISION**

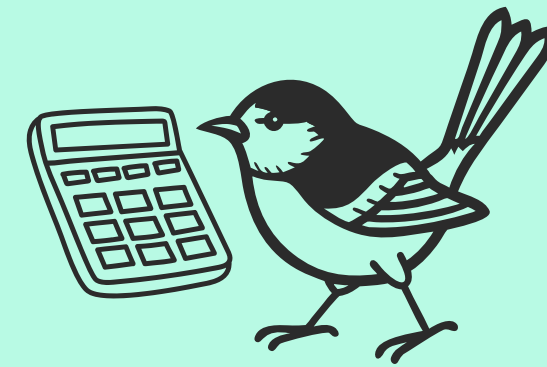
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Multiplication and Division: Solve Problems</b>	<ul style="list-style-type: none"> <li>- Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</li> </ul> <p>Spring 2</p>	<ul style="list-style-type: none"> <li>- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts</li> </ul> <p>Spring 1</p>	<ul style="list-style-type: none"> <li>- Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which <math>n</math> objects are connected to <math>m</math> objects</li> </ul> <p>Spring 2</p>	<ul style="list-style-type: none"> <li>- Solve problems involving multiplying and dividing, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as <math>n</math> objects are connected to <math>m</math> objects</li> </ul> <p>Spring 1</p>	<ul style="list-style-type: none"> <li>- Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes</li> <li>- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</li> </ul> <p>Spring 1</p>	<ul style="list-style-type: none"> <li>- Solve problems involving addition, subtraction, multiplication and division</li> </ul> <p>Autumn 2</p>
<b>Multiplication and Division: Combined Operations</b>					<ul style="list-style-type: none"> <li>- Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</li> </ul> <p>Autumn 2, Spring 1</p>	<ul style="list-style-type: none"> <li>- Use their knowledge of the order of operations to carry out calculations involving the four operations</li> </ul> <p>Autumn 2</p>

**FRACTIONS,  
DECIMALS,  
PERCENTAGES**

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Fractions: Recognise and Write</b></p>	<ul style="list-style-type: none"> <li>- Recognise, find and name a half as one of two equal parts of an object, shape or quantity</li> <li>- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> </ul>	<ul style="list-style-type: none"> <li>- Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</li> <li>- Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</li> <li>- Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</li> </ul>	<ul style="list-style-type: none"> <li>- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten</li> </ul>	<ul style="list-style-type: none"> <li>- identify, name and write equivalent fractions of a given fractions, represented visually, including tenths and hundredths</li> <li>- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt;1</math> as a mixed number. e.g. <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}</math></li> </ul>	
	Summer 1	Summer 1	Summer 1	Spring 2	Spring 2	

**FRACTIONS,  
DECIMALS,  
PERCENTAGES**

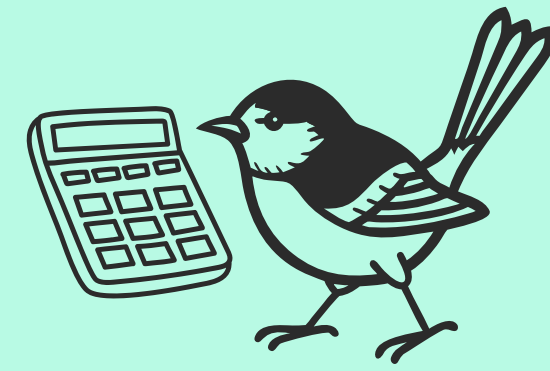
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Fractions: Compare</b>		<ul style="list-style-type: none"> <li>- Recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Recognise and show, using diagrams, equivalent fractions with small denominators</li> <li>- Compare and order unit fractions, and fractions with the same denominators</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Recognise and show, using diagrams, families of common equivalent fractions</li> </ul> <p>Spring 2</p>	<ul style="list-style-type: none"> <li>- Compare and order fractions whose denominators are all multiples of the same number</li> </ul> <p>Spring 1</p>	<ul style="list-style-type: none"> <li>- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination</li> <li>- Compare and order fractions, including fractions <math>&gt;1</math></li> </ul> <p>Spring 1</p>
<b>Fractions: Calculations</b>		<ul style="list-style-type: none"> <li>- Write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Add and subtract fractions with the same denominator within one whole [for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>]</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Add and subtract fractions with the same denominator</li> </ul> <p>Spring 2</p>	<ul style="list-style-type: none"> <li>- Add and subtract fractions with the same denominator and denominators that are multiples of the same number</li> <li>- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> </ul> <p>Spring 2</p>	<ul style="list-style-type: none"> <li>- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</li> <li>- Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, <math>\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}</math>]</li> <li>- Divide proper fractions by whole numbers [for example <math>\frac{1}{3} \div 2 = \frac{1}{6}</math>]</li> </ul> <p>Spring 1</p>

**FRACTIONS,  
DECIMALS,  
PERCENTAGES**

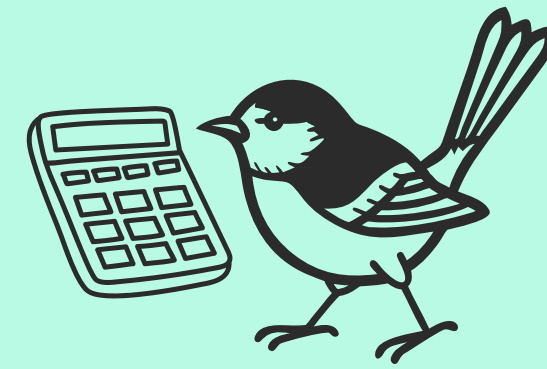
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Fractions: Solve Problems</b>			- Solve problems that involve all of the above	- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number		
			Summer 1	Spring 2		
<b>Decimals: Recognise and Write</b>				- Recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$	- Read and write decimal numbers as fractions [for example $0.71 = \frac{71}{100}$ ] - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	- Identify the value of each digit in numbers given to three decimal places
				Summer 1	Summer 1	Autumn 1, Spring 1

**FRACTIONS,  
DECIMALS,  
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# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Compare				<ul style="list-style-type: none"> <li>- Round decimals with one decimal place to the nearest whole number</li> <li>- Compare numbers with the same number of decimal places up to two decimal places</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Round decimals with two decimal places to the nearest whole number and to one decimal place</li> <li>- Read, write, order and compare numbers with up to three decimal places</li> </ul> <p>Summer 1</p>	
Decimals: Calculations and Problems				<ul style="list-style-type: none"> <li>- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Solve problems involving number up to three decimal places</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Multiply and divide numbers by 10,100 and 1000 giving answers up to three decimal places</li> <li>- Multiply one-digit numbers with up to two decimal places by whole numbers</li> <li>- Use written division methods in cases where the answer has up to two decimal places</li> <li>- Solve problems which require answers to be rounded to specified degrees of accuracy</li> </ul> <p>Autumn 1, Spring 1</p>

**FRACTIONS,  
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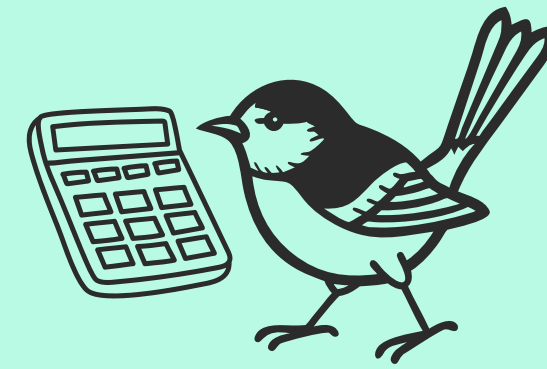
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions, Decimals and Percentages				<ul style="list-style-type: none"> <li>- Solve simple measure and money problems involving fractions and decimals to two decimal places</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal</li> <li>- Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25</li> </ul>	<ul style="list-style-type: none"> <li>- Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, <math>\frac{3}{8}</math>]</li> <li>- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</li> </ul>
				Summer 1	Summer 1	Spring 1, Spring 2

**RATIO AND PROPORTION**

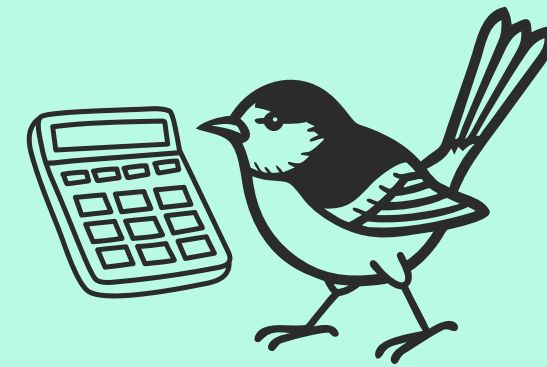
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ratio and Proportion						<ul style="list-style-type: none"><li>- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</li><li>- Solve problems involving the calculation of percentages [for example of measures, and such as 15% of 360] and the use of percentages for comparison</li><li>- Solve problems involving similar shapes where the scale factor is known or can be found</li><li>- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples</li></ul> <p>Taught through Maths Skills</p>

ALGEBRA

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Algebra	<ul style="list-style-type: none"><li>- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = \square - 9</math></li></ul> <p>Autumn 2, Spring 2</p>	<ul style="list-style-type: none"><li>- Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</li></ul> <p>Autumn 2, Spring 1</p>	<ul style="list-style-type: none"><li>- Solve problems, including missing number problems</li></ul> <p>Autumn 2, Spring 2</p>			<ul style="list-style-type: none"><li>- Use simple formulae</li><li>- Generate and describe linear number sequences</li><li>- Express missing number problems algebraically</li><li>- Find pairs of numbers that satisfy an equation with two unknowns</li><li>- Enumerate possibilities of combinations of two variables</li></ul> <p>Summer 1</p>

Note - although algebraic notation is not introduced until Year 6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from Years 1, 2 and 3

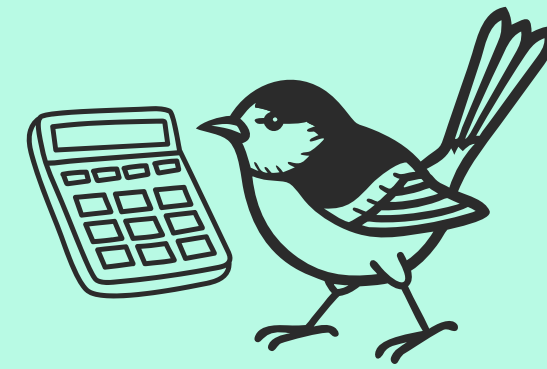
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Measurement: Using Measures</b></p>	<ul style="list-style-type: none"> <li>- Compare, describe and solve practical problems of:                             <ul style="list-style-type: none"> <li>&gt; lengths and heights [for example long/short, longer/shorter, tall/short, double/half]</li> <li>&gt; mass/weight [for example, heavy/light, heavier than, lighter than]</li> <li>&gt; capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]</li> <li>&gt; time [for example, quicker, slower, earlier, later]</li> </ul> </li> <li>- Measure and begin to record the following:                             <ul style="list-style-type: none"> <li>&gt; lengths and heights</li> <li>&gt; mass/weight</li> <li>&gt; capacity and volume</li> <li>&gt; time (hours, minutes, seconds)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (C); capacity (litres/ml) to the nearest appropriate unit, using rules, scales, thermometers and measuring vessels</li> <li>- Compare and order lengths, mass, volume/capacity and record the results using &lt;, &gt; and =</li> </ul>	<ul style="list-style-type: none"> <li>- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li> </ul>	<ul style="list-style-type: none"> <li>- Convert between different units of measure (for example, kilometre to metre; hour to minute)</li> <li>- estimate compare and calculate different measures</li> </ul>	<ul style="list-style-type: none"> <li>- Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</li> <li>- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</li> <li>- Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling</li> </ul>	<ul style="list-style-type: none"> <li>- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</li> <li>- Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to three decimal places</li> <li>- Convert between miles and kilometres</li> </ul>
	<p>Summer 1</p>	<p>Spring 2</p>	<p>Summer 2</p>	<p>Autumn 2, Spring 1</p>	<p>Summer 2</p>	<p>Summer 2</p>

MEASUREMENT

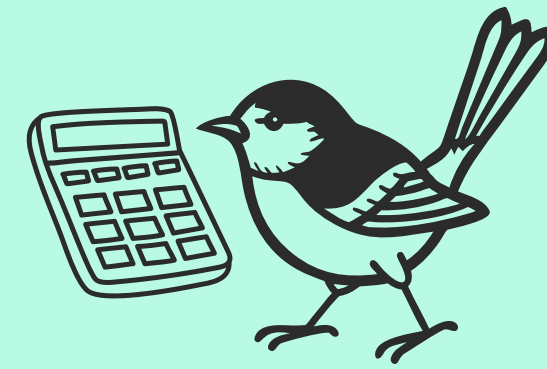
# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Money	<ul style="list-style-type: none"><li>- Recognise and know the value of different denominations of coins and notes</li></ul>	<ul style="list-style-type: none"><li>- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li><li>- Find different combinations of coins that equal the same amount of money</li><li>- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li></ul>	<ul style="list-style-type: none"><li>- Add and subtract amounts of money to give change, using both £ and p in practical contexts</li></ul>	<ul style="list-style-type: none"><li>- Estimate, compare and calculate different measures, including money in pounds and pence</li></ul>	<ul style="list-style-type: none"><li>- Use all four operations to solve problems involving measure [for example, money]</li></ul>	

Money is taught through Economics as part of our Money Mondays

# Maths at Wren's Nest Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Time	<ul style="list-style-type: none"> <li>- Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</li> <li>- Recognise and use language relating to dates, including days of the week, weeks, months and years</li> <li>- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</li> </ul>	<ul style="list-style-type: none"> <li>- Compare and sequence intervals of time</li> <li>- Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times</li> <li>- Know the number of minutes in an hour and the number of hours in a day</li> </ul>	<ul style="list-style-type: none"> <li>- Tell and write the time from an analogue clock, including using Roman Numerals from I to XII, and 12-hour and 24-hour clocks</li> <li>- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight</li> <li>- Know the number of seconds in a minute and the number of days in each month, year and leap year</li> <li>- Compare durations of events [for example to calculate the time taken by particular events or tasks]</li> </ul>	<ul style="list-style-type: none"> <li>- Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul>	<ul style="list-style-type: none"> <li>- Solve problems involving converting between units of time</li> </ul>	<ul style="list-style-type: none"> <li>- Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa</li> </ul>

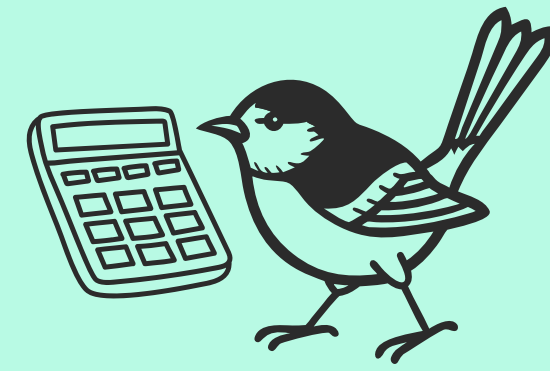
MEASUREMENT

# Maths at Wren's Nest Progression



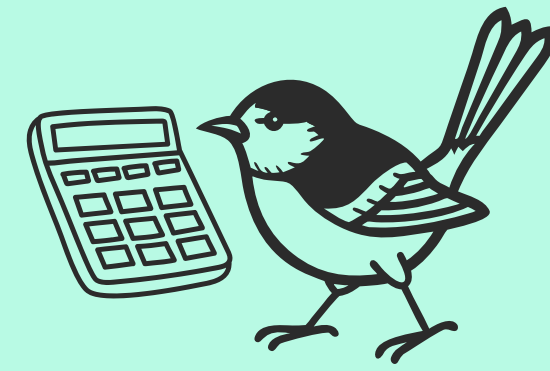
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Perimeter, Area and Volume			<ul style="list-style-type: none"><li>- Measure the perimeter of simple 2D shapes</li></ul>	<ul style="list-style-type: none"><li>- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li><li>- Find the area of rectilinear shapes by counting squares</li></ul>	<ul style="list-style-type: none"><li>- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</li><li>- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes</li><li>- Estimate volume [for example, using 1cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]</li></ul>	<ul style="list-style-type: none"><li>- Recognise that shapes with the same areas can have different perimeters and vice versa</li><li>- Recognise when it is possible to use formulae for area and volume of shape</li><li>- Calculate the area of parallelograms and triangles</li><li>- calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>]</li></ul>
			Summer 2	Autumn 2, Spring 1	Summer 2	Summer 2

# Maths Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Geometry: 2D shapes</b>	<ul style="list-style-type: none"> <li>- Recognise and name common 2D shapes [for example, rectangles (including squares), circles and triangles]</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line</li> <li>- Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</li> <li>- Compare and sort common 2D shapes and everyday objects</li> </ul> <p>Summer 2</p>	<ul style="list-style-type: none"> <li>- Draw 2D shapes</li> </ul> <p>Summer 2</p>	<ul style="list-style-type: none"> <li>- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>- Identify lines of symmetry in 2D shapes presented in different orientations</li> </ul> <p>Summer 2</p>	<ul style="list-style-type: none"> <li>- distinguish between regular and irregular polygons based on reasoning about equal sides and angles</li> <li>- Use the properties of rectangles to deduce related facts and find missing lengths and angles</li> </ul> <p>Summer 2</p>	<ul style="list-style-type: none"> <li>- Draw 2D shapes using given dimensions and angles</li> <li>- Compare and classify geometric shapes based on their properties and sizes</li> <li>- Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</li> </ul> <p>Summer 2</p>
<b>Geometry: 3D shapes</b>	<ul style="list-style-type: none"> <li>- Recognise and name common 3D shapes [for example, cuboids (including cubes), pyramids and spheres]</li> </ul> <p>Summer 1</p>	<ul style="list-style-type: none"> <li>- Recognise and name common 3D shapes [for example, cuboids (including cubes), pyramids and spheres]</li> <li>- Compare and sort common 3D shapes and everyday objects</li> </ul> <p>Summer 2</p>	<ul style="list-style-type: none"> <li>- Make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them</li> </ul> <p>Summer 2</p>		<ul style="list-style-type: none"> <li>- Identify 3D shapes, including cubes and other cuboids, from 2D representations</li> </ul> <p>Summer 2</p>	<ul style="list-style-type: none"> <li>- Recognise, describe and build simple 3D shapes, including making nets</li> </ul> <p>Summer 2</p>

# Maths at Wren's Nest Progression

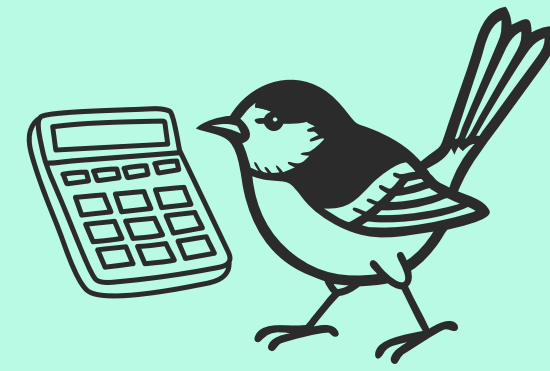


	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Angles and Lines			<ul style="list-style-type: none"> <li>- Recognise angles as a property of shape or a description of a turn</li> <li>- Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle</li> <li>- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines</li> </ul>	<ul style="list-style-type: none"> <li>- Identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>- Identify lines of symmetry in 2D shapes presented in different orientations</li> <li>- Complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul>	<ul style="list-style-type: none"> <li>- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</li> <li>- Draw given angles, and measure them in degrees</li> <li>- Identify:               <ul style="list-style-type: none"> <li>&gt; angles at a point and one whole turn (total 360 degrees)</li> <li>&gt; angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total 180 degrees)</li> <li>&gt; Other multiples of 90 degrees</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Find unknown angles in any triangles, quadrilaterals and regular polygons</li> <li>- Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</li> </ul>
			Summer 2	Summer 2	Summer 2	Summer 2

**GEOMETRY**

# Maths Progression

at Wren's Nest



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Geometry: Position and Direction</b>	<ul style="list-style-type: none"><li>- Describe position, direction and movement, including whole, half, quarter and three-quarter turns</li></ul>	<ul style="list-style-type: none"><li>- Order and arrange combinations of mathematical objects in patterns and sequences</li><li>- Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)</li></ul>		<ul style="list-style-type: none"><li>- Describe positions on a 2D grid as coordinates in the first quadrant</li><li>- Describe movements between positions as translations of a given unit to the left/right and up/down</li><li>- Plot specified points and draw sides to complete a given polygon</li></ul>	<ul style="list-style-type: none"><li>- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed</li></ul>	<ul style="list-style-type: none"><li>- Describe positions on the full coordinate grid (all four quadrants)</li><li>- Draw and translate simple shapes on the coordinate plane, and reflect them in the axis</li></ul>
	Summer 1	Summer 2		Summer 2	Summer 2	Summer 2

STATISTICS

# Maths Progression

at Wren's Nest



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Statistics: Present and Interpret</b>		<ul style="list-style-type: none"><li>- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</li></ul>	<ul style="list-style-type: none"><li>- Interpret and present data using bar charts, pictograms and tables</li></ul>	<ul style="list-style-type: none"><li>- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li></ul>	<ul style="list-style-type: none"><li>- Complete, read and interpret information in tables, including timetables</li></ul>	<ul style="list-style-type: none"><li>- Interpret and construct pie charts and line graphs and use these to solve problems</li></ul>
		Summer 1	Taught in Maths Skills	Summer 2	Taught in Life Skills	Summer 1
<b>Statistics: Solve Problems</b>		<ul style="list-style-type: none"><li>- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</li><li>- Ask and answer questions about totalling and comparing categorical data</li></ul>	<ul style="list-style-type: none"><li>- Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables</li></ul>	<ul style="list-style-type: none"><li>- Solve comparison, sum and difference problems using information resented in bar charts, pictograms, tables and other graphs</li></ul>	<ul style="list-style-type: none"><li>- Solve comparison, sum and difference problems using information presented in a line graph</li></ul>	<ul style="list-style-type: none"><li>- Calculate and interpret the mean as an average</li></ul>
		Summer 1	Taught in Maths Skills	Summer 2	Taught in Maths Skills	Summer 1