

National Curriculum Progression

EYFS to Year 6

#MathsEveryoneCan



Primary Progression – Notes and Guidance

# How does this document work?

The aim of this document is to give an at-a-glance guide to how the White Rose Maths curriculum links to the Key Stage 1 and 2 National Curriculum, and how it progresses through topics.

In each of the major topic areas (Number, Measurement, Geometry and Statistics), the curriculum has been broken down into key areas. For each of these areas, you can then see which NC objectives are covered in that year, together with the term and block in which that objective is first met in the White Rose Maths schemes.

These are the NC objectives. In our schemes these are broken down into the small steps.

Primary Progression – Place Value		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	<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 tens, fives and tens</li> </ul> <p>Autumn 1 Autumn 4 Spring 2 Summer 4</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, 6, 10 and 100; find 10 or 100 more or less than a given number</li> </ul> <p>Autumn 1 Autumn 3</p>	<ul style="list-style-type: none"> <li>count in multiples of 100; 10, 25 and 1000</li> <li>Count backwards through zero to include negative numbers</li> </ul> <p>Autumn 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 1000 000</li> <li>count forwards and backwards with positive and negative whole numbers, including through zero</li> </ul> <p>Autumn 1</p>		
	Place Value: Represent	<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 Autumn 4 Spring 2 Summer 4</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 1 000 000 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>	

Where this objective appears in our schemes of learning.

# Who is it for?

This progression will help:

- **Class teachers** – for each topic, teachers will be able to see exactly what they are meant to cover in their year group, but also what they can expect students to have covered in the previous year (Y2 to 6) , and where the learning continues next year (Y1 to 5)
- **Maths subject leaders and senior leaders**– the progression provides an overview of the whole primary phase so leaders can clearly see how topics are developed over time. They will also be aware of when topics are taught and what resources may be needed across the school at particular times.

# When are topics revisited?

The White Rose Maths curriculum is a cumulative curriculum, so that once a topic is covered it is met many times again in other contexts – often so many that listing them all is impractical. For example, place value is always covered in Autumn 1 but revisited within addition and subtraction, multiplication and division etc. We are also adding “Flashback Four” to our premium resources to support teachers with spaced repetition of key topics throughout and between years.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	<p>Count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. (EP 2020)</p> <p>Verbally count beyond 20 recognising the pattern of the counting system.</p> <p><b>Autumn 3</b> <b>Autumn 4</b> <b>Spring 2</b> <b>Spring 3</b></p>	<p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Count numbers to 100 in numerals.</p> <p>Count in multiples of two, fives and tens.</p> <p><b>Autumn Block 1</b> <b>Spring Block 1</b> <b>Spring Block 3</b> <b>Summer Block 4</b></p>	<p>Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.</p> <p><b>Autumn Block 1</b></p>	<p>Count from 0 in multiples of 4, 8, 50 and 100.</p> <p>find 10 or 100 more or less than a given number.</p> <p><b>Autumn Block 1</b> <b>Autumn Block 3</b></p>	<p>Count in multiples of 6, 7, 9, 25 and 1000.</p> <p>Count backwards through zero to include negative numbers.</p> <p><b>Autumn Block 1</b> <b>Autumn Block 4</b></p>	<p>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</p> <p>Count forwards and backwards with positive and negative whole numbers, including through zero.</p> <p><b>Autumn Block 1</b></p>	
Place Value: Represent	<p>Have a deep understanding of number to 10, including the composition of each number.</p> <p><b>Autumn 3</b></p>	<p>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer).</p> <p>Read and write numbers to 100 in numerals.</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p><b>Autumn Block 1</b> <b>Autumn Block 2</b> <b>Spring Block 3</b> <b>Summer Block 4</b></p>	<p>Read and write numbers to at least 100 in numerals and in words.</p> <p>Identify, represent and estimate numbers using different representations, including the number line.</p> <p><b>Autumn Block 1</b></p>	<p>Identify, represent and estimate numbers using different representations.</p> <p>Read and write numbers up to 1000 in numerals and in words.</p> <p><b>Autumn Block 1</b></p>	<p>Identify, represent and estimate numbers using different representations.</p> <p>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.</p> <p><b>Autumn Block 1</b></p>	<p>Read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit.</p> <p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p> <p><b>Autumn Block 1</b></p>	<p>Read, write, (order and compare) numbers to at least 10 000 000 and determine the value of each digit.</p> <p><b>Autumn Block 1</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Use PV and Compare	<p>Compare quantities upto 10 in different contexts recognising when one quantity is greater than, less than or the same as the other quantity.</p> <p><b>Autumn 4</b></p>	<p>Given a number, identify one more and one less.</p> <p><b>Autumn Block 1</b> <b>Spring Block 1</b> <b>Spring Block 3</b> <b>Summer Block 4</b></p>	<p>Recognise the place value of each digit in a two-digit number (tens, ones).</p> <p>Compare and order numbers from 0 up to 100.</p> <p>Use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs.</p> <p><b>Autumn Block 1</b></p>	<p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).</p> <p>Compare and order numbers up to 1000.</p> <p><b>Autumn Block 1</b></p>	<p>Find 1000 more or less than a given number.</p> <p>Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).</p> <p>Order and compare numbers beyond 1000.</p> <p><b>Autumn Block 1</b></p>	<p>(Read, write) order and compare numbers to at least 1 000 000 and determine the values of each digit.</p> <p><b>Autumn Block 1</b></p>	<p>(Read, write) order and compare numbers to at least 10 000 000 and determine the values of each digit.</p> <p><b>Autumn Block 1</b></p>
Place Value: Problems and Rounding			<p>Use place value and number facts to solve problems.</p> <p><b>Autumn Block 1</b></p>	<p>Solve number problems and practical problems involving these ideas.</p> <p><b>Autumn Block 1</b></p>	<p>Round any number to the nearest 10, 100 or 1000</p> <p>Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</p> <p><b>Autumn Block 1</b></p>	<p>Interpret negative numbers in context.</p> <p>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.</p> <p>Solve number problems and practical problems that involve all of the above.</p> <p><b>Autumn Block 1</b></p>	<p>Round any whole number to a required degree of accuracy.</p> <p>Use negative numbers in context, and calculate intervals across zero.</p> <p>Solve number and practical problems that involve all of the above.</p> <p><b>Autumn Block 1</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition and Subtraction: Recall, Represent, Use	<p>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10 including double facts.</p> <p><b>Spring 1</b> <b>Spring 3</b> <b>Summer</b></p>	<p>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p><b>Autumn Block 2</b> <b>Spring Block 2</b></p>	<p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.</p> <p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p> <p><b>Autumn 2</b></p>	<p>Estimate the answer to a calculation and use inverse operations to check answers.</p> <p><b>Autumn Block 2</b></p>	<p>Estimate and use inverse operations to check answers to a calculation.</p> <p><b>Autumn Block 2</b></p>	<p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p><b>Autumn Block 2</b></p>	
Addition and Subtraction: Calculations		<p>Add and subtract one-digit and two-digit numbers to 20, including zero.</p> <p><b>Autumn Block 2</b> <b>Spring Block 2</b></p>	<p>Add and subtract numbers using concrete objects, pictorial representations, and mentally including:</p> <ul style="list-style-type: none"> <li>• A two-digit number and ones</li> <li>• A two-digit number and tens</li> <li>• Two two-digit numbers</li> <li>• Adding three one-digit numbers</li> </ul> <p><b>Autumn 2</b></p>	<p>Add and subtract numbers mentally including:</p> <ul style="list-style-type: none"> <li>• A three-digit number and ones</li> <li>• A three-digit number and tens</li> <li>• A three-digit number and hundreds</li> </ul> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</p> <p><b>Autumn Block 2</b></p>	<p>Add and subtract numbers with up to four digits using the formal written methods of columnar addition and subtraction where appropriate.</p> <p><b>Autumn Block 2</b></p>	<p>Add and subtract whole numbers with more than four digits, including using formal written methods of (columnar addition and subtraction)</p> <p>Add and subtract numbers mentally with increasingly large numbers.</p> <p><b>Autumn Block 2</b></p>	<p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p><b>Autumn Block 2</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Solve Problems		<p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = ? - 9</math></p> <p><b>Autumn Block 2</b> <b>Spring Block 2</b></p>	<p>Solve problems with addition and subtraction:</p> <ul style="list-style-type: none"> <li>Using concrete objects and pictorial representations including those involving numbers quantities and measures.</li> <li>Applying their increasing knowledge of mental and written methods.</li> </ul> <p><b>Autumn 2</b></p>	<p>Solve problems including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p><b>Autumn Block 2</b></p>	<p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p> <p><b>Autumn Block 2</b></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><b>Autumn Block 2</b></p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p><b>Autumn Block 2</b></p>
Multiplication & Division: Recall, Represent, Use			<p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.</p> <p><b>Spring Block 2</b></p>	<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p> <p><b>Autumn Block 3</b> <b>Spring Block 1</b></p>	<p>Recall and multiplication and division facts for multiplication tables up to <math>12 \times 12</math>.</p> <p>Use place value, known and derived facts to multiply and divide mentally, including:</p> <ul style="list-style-type: none"> <li>multiplying by 0 and 1;</li> <li>dividing by 1;</li> <li>multiplying together three numbers.</li> </ul> <p>Recognise and use factor pairs and commutativity in mental calculations.</p> <p><b>Autumn Block 4</b> <b>Spring Block 1</b></p>	<p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</p> <p>Recognise and use square numbers and cube numbers, and the notation for squared (<math>^2</math>) and cubed (<math>^3</math>)</p> <p><b>Autumn Block 2</b></p>	<p>Identify common factors, common multiples and prime numbers.</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p> <p><b>Autumn Block 2</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication and Division: Calculations			<p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs.</p> <p><b>Spring Block 2</b></p>	<p>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 progressing to formal written methods.</p> <p><b>Autumn Block 3</b> <b>Spring Block 1</b></p>	<p>Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.</p> <p><b>Spring Block 1</b></p>	<p>Multiply numbers up to four digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers.</p> <p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>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.</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</p> <p><b>Autumn Block 3</b> <b>Spring Block 1</b></p>	<p>Multiply multi-digit numbers up to four digits by a two-digit whole number using the formal written method of long multiplication.</p> <p>Divide numbers up to four digits by a two-digit whole number using the formal written method of long division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.</p> <p>Divide numbers up to four digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p><b>Autumn Block 2</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Solve Problems		<p>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.</p> <p><b>Summer Block 1</b></p>	<p>Solve problems involving multiplication and division, using materials, arrays, repeated addition mental methods, and multiplication and division facts, including problems in contexts.</p> <p><b>Spring Block 2</b></p>	<p>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.</p> <p><b>Spring Block 1</b></p>	<p>Solve problems involving multiplying and adding, 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.</p> <p><b>Spring Block 1</b></p>	<p>Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.</p> <p>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</p> <p><b>Autumn Block 3</b> <b>Spring Block 1</b></p>	<p>Solve problems involving addition, subtraction, multiplication and division.</p> <p><b>Autumn Block 2</b></p>
Multiplication & Division: Combined Operations					<p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p><b>Autumn Block 2</b></p>	<p>Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equal sign.</p> <p><b>Spring Block 1</b></p>	<p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p><b>Autumn Block 2</b></p>



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Recognise and Write	<p>Explore and represent patterns with numbers upto 10, including evens and odds, double facts and how quantities can be distributed evenly.</p> <p><b>Autumn 2</b> <b>Summer</b></p>	<p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity.</p> <p>Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p> <p><b>Summer Block 2</b></p>	<p>Recognise, find, name and write fractions, one third, one quarter, two quarters and three quarters of a length, shape, set of objects or quantity.</p> <p><b>Summer Block 1</b></p>	<p>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.</p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p> <p>Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.</p> <p><b>Spring Block 3</b></p>	<p>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</p> <p><b>Spring Block 3</b> <b>Summer Block 1</b></p>	<p>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</p> <p>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 [for example, <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}</math>].</p> <p><b>Autumn Block 4</b></p>	
Fractions: Compare			<p>Recognise the equivalence of two quarters and one half.</p> <p><b>Summer Block 1</b></p>	<p>Recognise and show, using diagrams, equivalent fractions with small denominators.</p> <p>Compare and order unit fractions, and fractions with the same denominators.</p> <p><b>Spring Block 3</b></p>	<p>Recognise and show, using diagrams, families of common equivalent fractions.</p> <p><b>Spring Block 3</b></p>	<p>Compare and order fractions whose denominators are all multiples of the same number.</p> <p><b>Autumn Block 4</b></p>	<p>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</p> <p>Compare and order fractions, including fractions <math>&gt; 1</math>.</p> <p><b>Autumn Block 3</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Calculations			<p>Write simple fractions [for example, <math>\frac{1}{2}</math> of 6 = 3].</p> <p><b>Summer Block 1</b></p>	<p>Add and subtract fractions with the same denominator within one whole [for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>].</p> <p><b>Summer Block 1</b></p>	<p>Add and subtract fractions with the same denominator.</p> <p><b>Spring Block 3</b></p>	<p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p> <p><b>Autumn Block 4</b> <b>Spring Block 2</b></p>	<p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</p> <p>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>].</p> <p>Divide proper fractions by whole numbers [for example, <math>\frac{1}{3} \div 2 = \frac{1}{6}</math>].</p> <p><b>Autumn Block 3</b> <b>Autumn Block 4</b></p>
Fractions: Solve Problems				<p>Solve problems that involve all of the above.</p> <p><b>Spring Block 3</b> <b>Summer Block 1</b></p>	<p>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.</p> <p><b>Spring Block 3</b></p>		

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Recognise & Write					<p>Recognise and write decimal equivalents of any number of tenths or hundredths.</p> <p>Recognise and write decimal equivalents to one quarter, one half and three quarters.</p> <p><b>Spring Block 4</b> <b>Summer Block 1</b></p>	<p>Read and write decimal numbers as fractions [for example, <math>0.71 = \frac{71}{100}</math>].</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p><b>Spring Block 3</b> <b>Summer Block 3</b></p>	<p>Identify the value of each digit in numbers given to three decimal places.</p> <p><b>Spring Block 3</b></p>
Decimals: Compare					<p>Round decimals with one decimal place to the nearest whole number.</p> <p>Compare numbers with the same number of decimal places up to two decimal places.</p> <p><b>Spring Block 4</b> <b>Summer Block 1</b></p>	<p>Round decimals with two decimal places to the nearest whole number and to one decimal place.</p> <p>Read, write, order and compare numbers with up to three decimal places.</p> <p><b>Spring Block 3</b> <b>Summer Block 3</b></p>	
Decimals: Calculations & Problems					<p>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.</p> <p><b>Spring Block 4</b> <b>Summer Block 1</b></p>	<p>Solve problems involving numbers up to three decimal places.</p> <p><b>Spring Block 3</b> <b>Summer Block 3</b></p>	<p>Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.</p> <p>Multiply one-digit numbers with up to two decimal places by whole numbers.</p> <p>Use written division methods in cases where the answer has up to two decimal places.</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy.</p> <p><b>Spring Block 3</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions, Decimals and Percentages					<p>Solve simple measure and money problems involving fractions and decimals to two decimal places.</p> <p><b>Spring Block 3</b> <b>Spring Block 4</b> <b>Summer Block 1</b></p>	<p>Recognise the per cent 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.</p> <p>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.</p> <p><b>Spring Block 3</b></p>	<p>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>].</p> <p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p> <p><b>Spring Block 3</b> <b>Spring Block 4</b></p>
Ratio and Proportion							<p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</p> <p>Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p> <p><b>Spring Block 1</b></p>

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Algebra		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solves missing number problems.	Solve problems including missing number problems.			<p>Use simple formulae e. g. <math>5x + 1 = 56</math>.</p> <p>Generate and describe linear number sequences e.g.</p> <ul style="list-style-type: none"> <li>• <math>a + b = b + a</math></li> <li>• <math>s = r + t</math> so...</li> <li>• <math>t = s - r</math> and...</li> <li>• <math>r = s - t</math></li> </ul> <p>Express missing number problems algebraically.</p> <p>Find pairs of numbers that satisfy an equation with two unknowns.</p> <p>Enumerate possibilities of combinations of two variables.</p> <p><b>Spring Block 2</b></p>

Note – although algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the ‘missing number’ objectives from Y1/2/3

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Using Measures	<p>Use everyday language to talk about size, weight, capacity, position, distance, to compare quantities and objects and to solve problems. (ELG 2012)</p> <p><b>Autumn 2</b> <b>Summer</b></p>	<p>Compare, describe and solve practical problems for:</p> <ul style="list-style-type: none"> <li>lengths and heights [for example, long/short, taller/shorter, double/half];</li> <li>mass/weight [for example, heavy/light, heavier than, lighter than]</li> <li>capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]</li> <li>time [for example, quicker, slower, earlier, later].</li> </ul> <p>Measure and begin to record the following:</p> <ul style="list-style-type: none"> <li>lengths and heights;</li> <li>mass/weight;</li> <li>capacity and volume;</li> <li>time (hours, minutes, seconds)</li> </ul> <p><b>Spring Block 4</b> <b>Spring Block 5</b> <b>Summer Block 6</b></p>	<p>Choose and use appropriate standard units to estimate and measure:</p> <ul style="list-style-type: none"> <li>length/height in any direction (m/cm);</li> <li>mass (kg/g);</li> <li>temperature (°C);</li> <li>capacity (litres/ml)</li> </ul> <p>to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.</p> <p>Compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</p> <p><b>Spring Block 3</b> <b>Spring Block 4</b></p>	<p>Measure, compare, add and subtract:</p> <ul style="list-style-type: none"> <li>lengths (m/cm/mm);</li> <li>mass (kg/g);</li> <li>volume/capacity (l/ml).</li> </ul> <p><b>Spring Block 2</b> <b>Spring Block 4</b></p>	<p>Convert between different units of measure [for example, kilometre to metre; hour to minute].</p> <p>Estimate, compare and calculate different measures.</p> <p><b>Spring Block 2</b> <b>Summer Block 3</b></p>	<p>Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].</p> <p>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</p> <p>Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</p> <p><b>Spring Block 4</b> <b>Summer Block 5</b> <b>Summer Block 6</b></p>	<p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p> <p>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 to up to three decimal places.</p> <p>Convert between miles and kilometres.</p> <p><b>Autumn Block 5</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Money	<p>Use everyday language to talk about money to compare quantities and objects and to solve problems. (ELG 2012)</p>	<p>Recognise and know the value of different denominations of coins and notes.</p> <p><b>Summer Block 5</b></p>	<p>Recognise and use symbols for pounds (£) and pence (p).</p> <p>Combine amounts to make a particular value.</p> <p>Find different combinations of coins that equal the same amounts of money.</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p> <p><b>Spring Block 3</b></p>	<p>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</p> <p><b>Summer Block 2</b></p>	<p>Estimate, compare and calculate different measures, including money in pounds and pence.</p> <p><b>Summer Block 2</b></p>	<p>Use all four operations to solve problems involving measure [for example, money].</p> <p><b>Summer Block 3</b></p>	
Measurement: Time	<p>Use everyday language to talk about time to compare quantities and objects and to solve problems. (ELG 2012)</p> <p><b>Autumn 4</b></p>	<p>Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years.</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p> <p><b>Summer Block 6</b></p>	<p>Compare and sequence intervals of time.</p> <p>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.</p> <p>Know the number of minutes in an hour and the number of hours in a day.</p> <p><b>Summer Block 2</b></p>	<p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p> <p>Estimate and read time with increasing accuracy to the nearest minute.</p> <p>Record and compare time in terms of seconds, minutes and hours.</p> <p>Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight.</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year.</p> <p>Compare durations of events [for example to calculate the time taken by particular events or tasks].</p> <p><b>Summer Block 3</b></p>	<p>Read, write and convert time between analogue and digital 12-hour and 24-hour clocks.</p> <p>Solve problems involving converting from:</p> <ul style="list-style-type: none"> <li>• hours to minutes;</li> <li>• minutes to seconds;</li> <li>• years to months;</li> <li>• weeks to days.</li> </ul> <p><b>Summer Block 3</b></p>	<p>Solve problems involving converting between units of time.</p> <p><b>Summer Block 5</b></p>	<p>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.</p> <p><b>Autumn Block 5</b></p> <p><i>Note – In the WRM schemes, time conversions are covered in Y5; the Y6 block concentrates on metric units.</i></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Perimeter, Area and Volume				<p>Measure the perimeter of simple 2D shapes.</p> <p><b>Spring Block 2</b></p>	<p>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</p> <p>Find the area of rectilinear shapes by counting squares.</p> <p><b>Autumn Block 3</b> <b>Spring Block 2</b></p>	<p>Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</p> <p>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.</p> <p>Estimate volume [for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water].</p> <p><b>Spring Block 4</b> <b>Summer Block 6</b></p>	<p>Recognise that shapes with the same areas can have different perimeters and vice versa.</p> <p>Recognise when it is possible to use formulae for area of shapes.</p> <p>Calculate the area of parallelograms and triangles.</p> <p>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>].</p> <p><b>Spring Block 5</b></p>



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: 2D Shapes	<p>Begin to use mathematical names for “flat” 2D shapes, and mathematical terms to describe shapes. (2012)</p> <p>Explore characteristics of everyday shapes and use mathematical language to describe them. (2012)</p> <p>Rich opportunities for children to develop reasoning skills across all areas of mathematics including shape, space and measures. (EP 2020)</p> <p><b>Autumn 3</b> <b>Autumn 4</b> <b>Spring</b></p>	<p>Recognise and name common 2D shapes [for example rectangles (including squares), circles and triangles].</p> <p><b>Autumn Block 3</b></p>	<p>Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.</p> <p>Identify 2-D shapes on the surface of 3-D shapes [for example, a circle on a cylinder and a triangle on a pyramid].</p> <p>Compare and sort common 2-D everyday objects.</p> <p><b>Autumn Block 3</b></p>	<p>Draw 2D shapes.</p> <p><b>Summer Block 4</b></p>	<p>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</p> <p>Identify lines of symmetry in 2-D shapes presented in different orientations.</p> <p><b>Summer Block 4</b></p>	<p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p><b>Summer Block 1</b></p>	<p>Draw 2-D shapes using given dimensions and angles.</p> <p>Compare and classify geometric shapes based on their properties and sizes.</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</p> <p><b>Summer Block 1</b></p>
Geometry: 3D Shapes	<p>Begin to use mathematical names for “solid” 3D shapes and mathematical terms to describe shapes. (2012)</p> <p>Explore characteristics of everyday shapes and use mathematical language to describe them. (2012)</p> <p>Rich opportunities for children to develop reasoning skills across all areas of mathematics including shape, space and measures. (EP 2020)</p> <p><b>Spring</b></p>	<p>Recognise and name common 3D shapes [for example, cuboids (including cubes), pyramids and spheres]</p> <p><b>Autumn Block 3</b></p>	<p>Recognise and name common 3D shapes [for example, cuboids (including cubes), pyramids and spheres].</p> <p>Compare and sort common 3D shapes and everyday objects.</p> <p><b>Autumn Block 3</b></p>	<p>Make 3D shapes using modelling materials.</p> <p>Recognise 3D shapes in different orientations and describe them.</p> <p><b>Summer Block 4</b></p>		<p>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</p> <p><b>Summer Block 1</b></p>	<p>Recognise, describe and build simple 3D shapes, including making nets.</p> <p><b>Summer Block 1</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Angles and Lines				<p>Recognise angles as a property of shape or a description of a turn.</p> <p>Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn.</p> <p>Identify whether angles are greater than or less than a right angle.</p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p> <p><b>Summer Block 4</b></p>	<p>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</p> <p>Identify lines of symmetry in 2-D shapes presented in different orientations.</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry.</p> <p><b>Summer Block 4</b></p>	<p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</p> <p>Draw given angles and measure them in degrees (<math>^{\circ}</math>).</p> <p>Identify:</p> <ul style="list-style-type: none"> <li>• angles at a point and one whole turn (total <math>360^{\circ}</math>)</li> <li>• angles at a point on a straight line and <math>1/2</math> a turn (total <math>180^{\circ}</math>)</li> <li>• other multiples of <math>90^{\circ}</math></li> </ul> <p><b>Summer Block 2</b></p>	<p>Find unknown angles in any triangles, quadrilaterals and regular polygons.</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p> <p><b>Summer Block 1</b></p>
Geometry: Position and Direction	<p>Use everyday language to talk about position, distance, to compare quantities and objects and to solve problems. (ELG 2012)</p> <p><b>Autumn 3</b></p>	<p>Describe position, direction and movement, including whole, half, quarter and three-quarter turns.</p> <p><b>Summer Block 3</b></p>	<p>Order and arrange combinations of mathematical objects in patterns and sequences.</p> <p>Use mathematical vocabulary to describe position, direction and movement, including:</p> <ul style="list-style-type: none"> <li>• movement in a straight line</li> <li>• distinguishing between rotation as a turn</li> <li>• in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</li> </ul> <p><b>Summer Block 4</b></p>		<p>Describe positions on a 2-D grid as coordinates in the first quadrant.</p> <p>Describe movements between positions as translations of a given unit to the left/right and up/down.</p> <p>Plot specified points and draw sides to complete a given polygon.</p> <p><b>Summer Block 6</b></p>	<p>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.</p> <p><b>Summer Block 2</b></p>	<p>Describe positions on the full coordinate grid (all four quadrants).</p> <p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p> <p><b>Summer Block 2</b></p>

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics: Present & Interpret			<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</p> <p><b>Summer Block 3</b></p>	<p>Interpret and present data using bar charts, pictograms and tables.</p> <p><b>Summer Block 5</b></p>	<p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.</p> <p><b>Summer Block 5</b></p>	<p>Complete, read and interpret information in tables, including timetables.</p> <p><b>Spring Block 5</b></p>	<p>Interpret and construct pie charts and line graphs and use these to solve problems.</p> <p><b>Spring Block 6</b></p>
Statistics: Solve Problems			<p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</p> <p>Ask and answer questions about totalling and comparing categorical data.</p> <p><b>Summer Block 3</b></p>	<p>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.</p> <p><b>Summer Block 5</b></p>	<p>Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p> <p><b>Summer Block 5</b></p>	<p>Solve comparison, sum and difference problems using information presented in a line graph.</p> <p><b>Spring Block 5</b></p>	<p>Calculate and interpret the mean as an average.</p> <p><b>Spring Block 6</b></p>

## EYFS – Block Overview (2022 - 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	<b>Getting to know you</b> (Take this time to play and get to know the children!)  Contains overviews and frequently asked questions  VIEW		<b>Just like me!</b> Match and sort Compare amounts Compare size, mass & capacity Exploring pattern  VIEW			<b>It's me 1, 2, 3!</b> Representing 1, 2 & 3 Comparing 1, 2 & 3 Composition of 1, 2 & 3 Circles and triangles Positional language  VIEW			<b>Light &amp; dark</b> Representing numbers to 5 One more or less Shapes with 4 sides Time  VIEW			
Spring term	<b>Alive in 5!</b> Introducing zero Comparing numbers to 5 Composition of 4 & 5 Compare mass (2) Compare capacity (2)  VIEW		<b>Growing 6, 7, 8</b> 6, 7 & 8 Combining two amounts Making pairs Length & height Time (2)  VIEW			<b>Building 9 &amp; 10</b> Counting to 9 & 10 Comparing numbers to 10 Bonds to 10 3-D shapes Spatial awareness Patterns  VIEW			Consolidation			
Summer term	<b>To 20 and beyond</b> Build numbers beyond 10 Count patterns beyond 10 Spatial reasoning 1 Match, rotate, manipulate  VIEW		<b>First, then, now</b> Adding more Taking away Spatial reasoning 2 Compose and decompose  VIEW			<b>Find my pattern</b> Doubling Sharing & grouping Even & odd Spatial reasoning 3 Visualise and build  VIEW			<b>On the move</b> Deepening understanding Patterns & relationships Spatial mapping (4) Mapping  VIEW			

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## Year 1 – Block Overview (2022 – 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place value (within 10)</b>					Number <b>Addition and subtraction (within 10)</b>					Geometry Shape	Consolidation
Spring	Number <b>Place value (within 20)</b>			Number <b>Addition and subtraction (within 20)</b>			Number <b>Place value (within 50)</b>		Measurement <b>Length and height</b>		Measurement <b>Mass and volume</b>	
Summer	Number <b>Multiplication and division</b>			Number <b>Fractions</b>		Geometry <b>Position and direction</b>	Number <b>Place value (within 100)</b>		Measurement <b>Money</b>	Measurement <b>Time</b>		Consolidation

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## Year 2 – Block Overview (2022 – 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place value</b>				Number <b>Addition and subtraction</b>				Geometry <b>Shape</b>			
Spring	Measurement <b>Money</b>		Number <b>Multiplication and division</b>				Measurement <b>Length and height</b>		Measurement <b>Mass, capacity and temperature</b>			
Summer	Number <b>Fractions</b>			Measurement <b>Time</b>			<b>Statistics</b>		Geometry <b>Position and direction</b>		<b>Consolidation</b>	

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Click on the Schemes and Resources tab and then Year 2 (New Schemes) tab for all of the related resources.

## Year 3 – Block Overview (2022 – 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place value</b>			Number <b>Addition and subtraction</b>				Number <b>Multiplication and division A</b>				
Spring	Number <b>Multiplication and division B</b>			Measurement <b>Length and perimeter</b>			Number <b>Fractions A</b>		Measurement <b>Mass and capacity</b>			
Summer	Number <b>Fractions B</b>		Measurement <b>Money</b>	Measurement <b>Time</b>			Geometry <b>Shape</b>		Statistics		Consolidation	

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Click on the Schemes and Resources tab and then Year 3 (New Schemes) tab for all of the related resources.

## Year 4 – Block Overview (2022 – 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place value</b>				Number <b>Addition and subtraction</b>			Measurement <b>Area</b>	Number <b>Multiplication and division A</b>			Consolidation
Spring	Number <b>Multiplication and division B</b>			Measurement <b>Length and perimeter</b>		Number <b>Fractions</b>			Number <b>Decimals A</b>			
Summer	Number <b>Decimals B</b>	Measurement <b>Money</b>		Measurement <b>Time</b>		Consolidation	Geometry <b>Shape</b>		Statistics	Geometry <b>Position and direction</b>		

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*Click on the Schemes and Resources tab and then Year 4 (New Schemes) tab for all of the related resources.*



Year 5 – Block Overview (2022 – 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place value</b>			Number <b>Addition and subtraction</b>		Number <b>Multiplication and division A</b>			Number <b>Fractions A</b>			
Spring	Number <b>Multiplication and division B</b>			Number <b>Fractions B</b>		Number <b>Decimals and percentages</b>			Measurement <b>Perimeter and area</b>		Statistics	
Summer	Geometry <b>Shape</b>			Geometry <b>Position and direction</b>		Number <b>Decimals</b>			Number <b>Negative numbers</b>	Measurement <b>Converting units</b>		Measurement <b>Volume</b>

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Year 6 – Block Overview (2022 – 2023)

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number <b>Place value</b>		Number <b>Addition, subtraction, multiplication and division</b>				Number <b>Fractions A</b>		Number <b>Fractions B</b>		Measurement <b>Converting units</b>	
Spring	<b>Ratio</b>		<b>Algebra</b>		Number <b>Decimals</b>		Number <b>Fractions, decimals and percentages</b>		Measurement <b>Area, perimeter and volume</b>		<b>Statistics</b>	
Summer	Geometry <b>Shape</b>			Geometry <b>Position and direction</b>	Themed projects, consolidation and problem solving							

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Click on the Schemes and Resources tab and then Year 6 (New Schemes) tab for all of the related resources.