

Autumn

Weeks	Y3	Y4
1-4	<p><b>Number - number and place value</b></p> <p>Pupils should be taught to:</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> <li>recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</li> <li>compare and order numbers up to 1000</li> <li>identify, represent and estimate numbers using different representations</li> <li>read and write numbers up to 1000 in numerals and in words</li> <li>solve number problems and practical problems involving these ideas.</li> </ul>	<p><b>Number - number and place value</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>count in multiples of 6, 7, 9, 25 and 1,000</li> <li>find 1,000 more or less than a given number</li> <li>count backwards through 0 to include negative numbers</li> <li>recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)</li> <li>order and compare numbers beyond 1,000</li> <li>identify, represent and estimate numbers using different representations</li> <li>round any number to the nearest 10, 100 or 1,000</li> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value</li> </ul>
5-10	<p><b>Number - addition and subtraction</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>add and subtract numbers mentally, including: <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> </li> <li>add and subtract numbers with up to three digits, using formal written methods of</li> <li>columnar addition and subtraction</li> <li>estimate the answer to a calculation and use inverse operations to check answers</li> </ul>	<p><b>Number - addition and subtraction</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</li> <li>estimate and use inverse operations to check answers to a calculation</li> <li>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul>

	<ul style="list-style-type: none"> <li>• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</li> </ul>	
11	<b>Consolidation</b>	<b>Measurement (Area)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• find the area of rectilinear shapes by counting squares</li> </ul>
12-15	<b>Number - multiplication and division A</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</li> </ul>	<b>Number - multiplication and division A</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>

## Spring

Weeks	Y3	Y4
1-2	<b>Number - multiplication and division A</b> Pupils should be taught to: recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	<b>Number - multiplication and division A</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>
3-6	<b>Number - multiplication and division B</b> <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 progressing to formal written methods</li> <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>	<b>Number - multiplication and division B</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers</li> <li>recognise and use factor pairs and commutativity in mental calculations</li> <li>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as <math>n</math> objects are connected to <math>m</math> objects</li> </ul>
7-8	<b>Measurement (Length and Perimeter)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li> <li>measure the perimeter of simple 2-D shapes</li> </ul>	<b>Measurement (Length and Perimeter)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <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> </ul>

9-12	<p><b>Number - fractions</b></p> <p>Pupils should be taught to:</p> <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> <li>• recognise and show, using diagrams, equivalent fractions with small denominators</li> <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><b>Number - fractions</b></p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• recognise and show, using diagrams, families of common equivalent fractions</li> <li>• count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10</li> <li>• 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</li> <li>• add and subtract fractions with the same denominator</li> </ul>
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## Summer

Weeks	Y3	Y4
1	<b>Number - fractions (continued)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator within one whole [for example, <math>5/7 + 1/7 = 6/7</math>]</li> <li>compare and order unit fractions, and fractions with the same denominators</li> <li>solve problems that involve all of the above</li> </ul>	<b>Number - fractions (continued)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator</li> </ul>
2-3	<b>Mass and Capacity</b> <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>	<b>Decimals</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>recognise and write decimal equivalents of any number of tenths or hundreds</li> <li>recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> <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> <li>round decimals with 1 decimal place to the nearest whole number</li> <li>compare numbers with the same number of decimal places up to 2 decimal places</li> </ul>
4-5	<b>Money</b> Pupils should be taught to: <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>	<b>Money</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>solve simple measure and money problems involving fractions and decimals to 2 decimal places</li> </ul>
6-7	<b>Geometry - properties of shapes</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</li> </ul>	<b>Geometry - properties of shapes</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> </ul>

	<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 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 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 2 right angles by size</li> <li>identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul>
8-9	<b>Statistics</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>interpret and present data using bar charts, pictograms and tables</li> <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>	<b>Statistics</b> Pupils should be taught to: <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> <li>solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</li> </ul>
10-11	<b>Measurement (Time)</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)</li> <li>measure the perimeter of simple 2-D shapes</li> <li>add and subtract amounts of money to give change, using both £ and p in practical contexts</li> <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, am/pm, morning, afternoon, noon and midnight</li> </ul>	<b>Measurement (Time)</b> Pupils should be taught to: <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>• 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>	
12	<b>CONSOLIDATION</b>	<b>Geometry - position and direction</b> Pupils should be taught to: <ul style="list-style-type: none"> <li>• describe positions on a 2-D 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>