

## Year 4 Programme of Study - 'Term per page overview' 2017-2018 FINAL

Term	National Curriculum requirements	
<b>Autumn</b>	<b>Unit 1</b> <b>Reasoning with 4 digit numbers</b>  <b>(2 weeks)</b>	<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> <li>solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> <li>identify, represent and estimate numbers using different representations</li> <li>round any number to the nearest 10, 100 or 1000</li> <li>count in multiples of 6, 7, 9, 25 and 1000</li> </ul>
	<b>Unit 2</b> <b>Addition and subtraction</b>  <b>(3 weeks)</b>	<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>
	<b>Unit 3</b> <b>Multiplication and division</b>  <b>(3 weeks)</b>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>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</li> <li>recognise and use factor pairs and commutativity in mental calculations</li> <li>use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> <li>multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> </ul>
	<b>Unit 4</b> <b>Interpreting and presenting data</b>  <b>(2 weeks)</b>	<ul style="list-style-type: none"> <li>solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</li> <li>interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> </ul>

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<b>Spring</b>	<b>Unit 5</b> <b>Securing multiplication facts</b>  <b>(1 week)</b>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>
	<b>Unit 6</b> <b>Fractions</b>  <b>(4 weeks)</b>	<ul style="list-style-type: none"> <li>add and subtract fractions with the same denominator</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 [for example, <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}</math>] (Y5)</li> <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 one hundred and dividing tenths by ten</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> </ul>
	<b>Unit 7</b> <b>Time</b>  <b>(1 week)</b>	<ul style="list-style-type: none"> <li>convert between different units of measure [for example, hour to minute]</li> <li>problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> <li>write and convert time between analogue and digital 12- and 24-hour clocks</li> </ul>
	<b>Unit 8</b> <b>Decimals</b>  <b>(3 weeks)</b>	<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> <li>recognise and write decimal equivalents of any number of tenths or hundredths</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>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>
	<b>Unit 9</b> <b>Area and perimeter</b>  <b>(2 weeks)</b>	<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 measure [for example, kilometre to metre]</li> <li>find the area of rectilinear shapes by counting squares</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>) (Y5)</li> <li>measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres (Y5)</li> </ul>

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<b>Summer</b>	<b>Unit 10</b> <b>Solving measure and money problems</b> <b>(3 weeks)</b>	<ul style="list-style-type: none"> <li>convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>solve simple measure and money problems involving fractions and decimals to two decimal places</li> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>
	<b>Unit 11</b> <b>2-D shape and symmetry</b> <b>(3 weeks)</b>	<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 acute and obtuse angles and compare and order angles up to two 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>
	<b>Unit 12</b> <b>Position and direction</b> <b>(1 week)</b>	<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>
	<b>Unit 13</b> <b>Reasoning with patterns and sequences</b> <b>(2 weeks)</b>	<ul style="list-style-type: none"> <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> <li>count backwards through zero to include negative numbers</li> <li>recognise and use square numbers, and the notation for squared (<sup>2</sup>) (Y5)</li> </ul>
	<b>Unit 14</b> <b>3-D shape</b> <b>(1 week)</b>	<ul style="list-style-type: none"> <li>identify 3-D shapes, including cubes and other cuboids, from 2-D representations (Y5)</li> </ul>

