

# Year 4 - Yearly Objectives

<u>Times Tables</u>	<u>Number</u> Number and Place Value	<u>Number</u> Addition and Subtraction	<u>Number</u> Multiplication and Division	<u>Number</u> Fractions
<ul style="list-style-type: none"> <li>• Recall and use multiplication and division facts for 6 &amp; 9 times table recognising its relationship to the 3 times table.</li> <li>• Recall and use multiplication and division facts for 7 times table.</li> <li>• Recall and use multiplication and division facts for all tables up to 12x12.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise factor pairs of numbers and multiples of single digit numbers.</li> <li>• Recognise patterns across all of the multiplication tables.</li> <li>• Use the = sign to write equality statements for addition, subtraction and multiplication.</li> <li>• Count in multiples of 6, 7, 9, 25 and 1000.</li> <li>• Find 1000 more or less than a given number.</li> <li>• Count backwards through zero to include negative numbers.</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>• Identify, represent and estimate numbers using different representations, including the number line.</li> <li>• Round any number to the nearest 10, 100 or 1000.</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> <li>• Solve number and practical problems that involve all of the above and with increasingly large positive numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method).</li> <li>• Recall and use addition and subtraction facts for 100.</li> <li>• Recall and use addition and subtraction facts for multiples of 100 totalling 1000.</li> <li>• Add and subtract numbers with up to 4 digits and decimals with one decimal place 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>• 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>• Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</li> <li>• Use place value, known and derived facts to multiply and divide mentally, including:               <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> </li> <li>• Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, division (including interpreting remainders), integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</li> </ul>	<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>• Add and subtract fractions with the same denominator (using diagrams).</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>• Recognise and work out unit fractions of shapes, lengths, sets of objects eg; <math>\frac{1}{8}</math> of a bar made of 40 pieces.</li> <li>• Recognise and work out non-unit fractions of shapes, lengths, sets of objects eg <math>\frac{3}{4}</math> of a metre</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> <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>• Solve simple measure and money problems involving fractions and decimals to two decimal places.</li> </ul>

<u>Measurement</u>	<u>Geometry</u> Properties of shape	<u>Geometry</u> Position and direction	<u>Statistics</u>	<u>Problem Solving</u>
<ul style="list-style-type: none"> <li>• Independently estimate, compare and calculate measures in a variety of contexts including:               <ul style="list-style-type: none"> <li>- lengths</li> <li>- mass</li> <li>- volume/capacity</li> <li>- money in pounds and pence.</li> </ul> </li> <li>• Order temperatures including those below 0°C</li> <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. Convert between different units of measure: (e.g. kilometre to metre; hour to minute) and where appropriate record with decimal notation.</li> <li>• Read, write and convert time between analogue and digital 12.</li> <li>• Independently use £ and p in context and recognise equivalence - £3.06 = 306p.</li> <li>• Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days and problems involving money and measures.</li> </ul>	<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 2-D shapes presented in different orientations.</li> <li>• Complete a simple symmetric figure with respect to a specific line of symmetry.</li> <li>• Identify acute and obtuse angles and compare and order angles up to two right angles by size.</li> </ul>	<ul style="list-style-type: none"> <li>• Describe positions on a 2-D grid as coordinates in the first quadrant.</li> <li>• Plot specified points and draw sides to complete a given polygon.</li> <li>• Describe movements between positions as translations of a given unit to the left/right and up/down.</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> <li>• Interpret data presented in a range of graphical representations with a greater range of scale.</li> <li>• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</li> </ul>	<ul style="list-style-type: none"> <li>• Solve missing number problems for all four operations with increasingly larger numbers using knowledge of place value and relationships between numbers.</li> <li>• Estimate answers and use inverse operation to check answer in the context of a problem.</li> <li>• Solve 2 step word problems involving all 4 operations and deciding which operation to use and when.</li> <li>• Solve more complex scaling problems - 8 times as high.</li> <li>• Solve more complex correspondence problems - share 3 cakes between 10 people</li> </ul>