

## Numeracy Expectations Year 2

Counting	Place Value	Comparing and Ordering	Rounding, approximating and estimating.	Solving number Problems	Understanding Addition and Subtraction
Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	<p>Read and write numbers to at least 100 in numerals and in words</p> <p>Recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>Partition numbers in different ways (for example, <math>23 = 20 + 3</math> and <math>23 = 10 + 13</math>)</p> <p>Identify, represent and estimate numbers using different representations, including the number line.</p>	<p>Compare and order numbers from 0 up to 100; use <math>&lt;</math>, <math>&gt;</math> and <math>=</math> signs</p> <p>Find 1 or 10 more or less than a given number</p>	Round numbers to at least 100 to the nearest 10	Use place value and number facts to solve problems.	<p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p> <p>Understand subtraction as take away and difference (how many more, how many less/fewer)</p>
			<b>Multiplying by powers of 10</b>	<b>Sequences and patterns</b>	
			Understand the connection between the 10 multiplication table and place value	Describe and extend simple sequences involving counting on or back in different steps	

<b>Addition and subtraction facts</b>	<b>Addition and subtraction (Mental)</b>	<b>Estimating and checking calculations</b>	<b>Solving addition and Subtraction problems including those with missing numbers</b>	<b>Understanding multiplication and division</b>	<b>Multiplication and division facts</b>
<p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes)</p>	<p>Select a mental strategy appropriate for the numbers involved in the calculation</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 style="text-align: center;"><b>Addition and subtraction (written)</b></p> <p>Written methods are informal at this stage – see mental methods for expectation of calculations</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>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>Understand multiplication as repeated addition</p> <p>Understand division as sharing and grouping</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>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</p> <p>Derive and use doubles of simple two-digit numbers (numbers in which the ones total less than 10)</p> <p>Derive and use halves of simple two-digit even numbers (numbers in which the tens are even)</p>

Mental methods (x and ÷)	Written methods	Solving x and ÷ problems including those with missing numbers	Understanding Fractions	Fractions of objects, shapes and quantities	Counting, comparing and ordering fractions
Calculate mathematical statements for multiplication (using repeated addition) and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs	*Written methods are informal at this stage – see mental methods for expectation of calculations	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	Understand and use the terms numerator and denominator.  Understand that a fraction can describe part of a set.  Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be.	Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	Count on and back in steps of $\frac{1}{2}$ and $\frac{1}{4}$

Equivalence	Length / height	Mass	Capacity / volume	Temperature	Time
Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit using rulers  Compare and order height and record the results using >, < and =	Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales  Compare and order mass and record the results using >, < and =	Choose and use appropriate standard units to estimate and measure capacity and volume (litres/ml) to the nearest appropriate unit using measuring vessels  Compare and order volume/capacity and record the results using >, < and =	Choose and use appropriate standard units to estimate and measure temperature to the nearest degree (°C) using thermometers	Compare and sequence intervals of time Know the number of minutes in an hour and the number of hours in a day  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

Money	Solving problems involving money and measures	Properties of shape	Angles and rotation	Patterns	Position and direction
<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>Add and subtract money of the same unit, including giving change</p>	<p>Solve simple problems in a practical context involving addition and subtraction of money <i>and measures (including time)</i></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>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p>	<p>Use mathematical vocabulary to describe movement, including rotation as a turn</p> <p>Understand the link between rotation and turns in terms of right angles for quarter, half and three- quarter turns (clockwise and anti-clockwise)</p>	<p>Order and arrange combinations of mathematical objects in patterns and sequences</p>	<p>Use mathematical vocabulary to describe position, movement, including movement in a straight line</p>

Sorting and classifying	Present and interpret data	Solve problems using data			
<p>Compare and sort <i>objects, numbers and</i> common 2-D and 3-D shapes and everyday objects</p>	<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p>	<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>			