

Year 2

Assessment criteria for mathematics

Learning Objective		Key milestone indicator(s)	Introduction	Independence	Application/Mastery
To know and use numbers	Counting	I can count in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number forwards and backwards	With concrete objects, I can count forwards from 0, in steps of 2,5 and 10	When reminders are provided, I can count in steps of 2,3, 5 and 10 from 0 or 1 and in tens from any number, forwards or backwards	I can independently count in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number, forwards or backwards
	Representing	I can identify, represent and estimate numbers using different representations, including the number line	I can represent my work with objects or pictures and with the support of a teacher and the use of a number line	Generally, I can identify, represent and estimate numbers using different representations	I can independently identify, represent and estimate numbers using different representations
		I can read and write numbers to at least 100 in numerals and words	I can correctly read and write numbers 1 to 20 in numerals and words	I can correctly read and write numbers to at least 100 in numerals and words	I can correctly read and write numbers to at least 100 in numerals and words without support
	Comparing	I can compare and order numbers from 0 up to 100	I can place numbers 1–20 in ascending order	Generally, I can correctly order numbers between 0 and 100	I can correctly order numbers between 0 and 100 and am beginning to order numbers beyond 100
		I can use <, > and = signs	With support, I can point at the first, second etc. in a line I have a developing understanding of the <,> and = signs, but I need support to use these	I can use the signs <,> and = to compare numbers from 0 up to 100	I can use the signs <,> and = to compare numbers from 0 up to 100, or beyond, independently
	Place Value	I can recognise the place value of each digit in a 2-digit number (ones and tens)	When guidance or prompts are given, I can recognise the place value of each digit in a 2-digit number	Generally, I can recognise the place value of each digit in a 2-digit number	I can recognise the place value of each digit in a 2-digit number without support
Solving problems	I can use place value and number facts to solve problems	With support, I can access mathematical activities involving sorting, counting and measuring With the support of a teacher, I can use place value and number facts to solve problems	When reminders are provided, I can use place value and number facts to solve problems Generally, I can find the starting point in a problem	I can use place value and number facts to solve problems I can independently find the starting point in a problem	
To add and subtract	Checking	I can recognise and use the inverse relationship between addition and subtraction; I can use this to check calculations and solve missing	I have a developing understanding of the terminology 'addition' and 'subtraction'	When prompts are provided, I can use the inverse relationship between addition and subtraction to check my calculations	I can independently solve and answer number problems and check this by using the inverse relationship between addition and subtraction

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		number problems	<p>I understand addition as finding the total of two or more sets of objects</p> <p>I understand subtraction as 'taking away' objects and seeing how many are left</p> <p>With support, I can solve simple addition or subtraction problems</p>	I can recognise and calculate the subtraction facts linked to addition facts	I can independently solve missing number problems by using the inverse relationship between addition and subtraction
	Using number facts	I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	I can recall and use number bonds and addition and subtraction facts to 20, with reminders or prompts when needed	I can fluently recall addition and subtraction facts to 20	I can fluently and independently recall addition and subtraction facts to 100
	Complexity	<p>I can solve one-step problems with addition and subtraction:</p> <ul style="list-style-type: none"> - using concrete objects and pictorial representations including those involving numbers, quantities and measures - applying my increasing knowledge of mental and written methods 	<p>I can use the symbols + and = to record additions; I can use the symbols – and = to record subtractions</p> <p>With , I can solve addition and subtraction problems involving up to 10 objects</p> <p>Using concrete objects and pictorial representations, I can solve one-step addition and subtraction problems</p> <p>With the support of a teacher, I can answer more complicated one-step addition and subtraction problems</p>	<p>Generally, I can solve one-step problems with addition and subtraction (including those involving numbers, quantities and measures)</p> <p>I understood and can correctly use the addition (+), subtraction (-) and equals (=) signs</p>	<p>I can independently solve one-step and two-step addition and subtraction problems</p> <p>I can correctly and independently use the addition (+), subtraction (-) and equals (=) signs</p>
	Methods	<p>I can add and subtract numbers using concrete objects and pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> - a 2-digit number and ones - a 2-digit number and tens - Two 2-digit numbers - Adding three 1-digit numbers 	<p>I can record my work with objects, pictures or diagrams</p> <p>With prompts, I can add and subtract numbers of objects to 10</p> <p>With support, I can add and subtract 1-digit and 2-digit numbers to 20, and a 2-digit number and ones (using concrete objects, pictorial representations and mentally)</p>	<p>Generally, I can independently add and subtract 2-digit and 1-digit numbers</p> <p>When reminders are provided, I can add and subtract a 2-digit number and tens, two 2-digit numbers, and three 1-digit numbers (using concrete objects, pictorial representations and mentally)</p>	<p>I can independently add and subtract (using concrete objects, pictorial representations and mentally) the following:</p> <ul style="list-style-type: none"> - a 2-digit number and ones - a 2-digit number and tens - Two 2-digit numbers - Three 1-digit numbers

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		I know that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	I am developing my understanding that the addition of numbers can be done in any order and that the subtraction of one number from another cannot	Generally, I understand that two numbers can be added in any order but subtraction of one number from another cannot	I have a secure understanding that two numbers can be added in any order but subtraction of one number from another cannot
To multiply and divide	Methods	I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs	I am developing my understanding of the operations multiplication and division I am developing my understanding of the signs x, ÷, = and what they represent	Generally, I can accurately complete calculations involving multiplication and division Generally, I can correctly use the signs x, ÷ and =	Independently, I can calculate mathematical statements for multiplication and division and correctly use the signs x, ÷ and =
		I know that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	I am developing my understanding that multiplication of two numbers may be done in any order and division of one number by another cannot	Generally, I understand that multiplication of two numbers can be done in any order and division of one number by another cannot	I have a secure understanding that multiplication of two numbers can be done in any order and division of one number by another cannot
	Using multiplication and division facts	I can recall and use multiplication and division facts for the 2, 5 and 10 times tables I can recognise odd and even numbers	When help or structure is provided, I can recall multiplication and division facts for the 2, 5 and 10 times tables With the support of a teacher, pictorial representations and concrete objects, I can recognise odd and even numbers	I can recall and use multiplication and division facts for the 2, 5 and 10 times tables, with support if necessary Generally, I can recognise odd and even numbers	I can fluently recall and use multiplication and division facts for the 2, 5 and 10 times tables I can recognise odd and even numbers without support
		Complexity	I can solve one-step problems (including problems in context) involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts	With the support of a teacher, concrete objects, pictorial representations and arrays, I can solve one-step problems involving multiplication and division	I can solve one-step problems involving multiplication and divisions, when reminders are provided, and with the use of arrays if necessary
To use fractions	Recognising fractions	I can 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	I can split a group of objects into halves and quarters	With pictorial representations or concrete objects, I can recognise, find and name $\frac{1}{4}$, $\frac{2}{4}$, $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	I can find $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ in a variety of contexts
	Equivalence	I can write simple fractions (e.g. $\frac{1}{2}$ of $6 = 3$) and recognise the equivalence	With support, I can show an understanding of a $\frac{1}{2}$ and $\frac{1}{4}$ of a	When reminders are provided, I can write simple fractions (e.g. $\frac{1}{2}$,	I can independently write more complicated fractions (e.g. finding

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		of $\frac{2}{4}$ and $\frac{1}{2}$.	<p>given quantity</p> <p>When concrete objects, pictorial representations and the support of a teacher are provided, I can recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$</p>	<p>$\frac{1}{4}$ and $\frac{1}{2}$ of 6 = 3)</p> <p>Generally, I recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ as a decimal or percentage</p>	<p>$\frac{1}{3}$, $\frac{1}{6}$ and $\frac{1}{5}$ and $\frac{1}{3}$ of 12 = 4)</p> <p>I can recognise the equivalence of $\frac{2}{4}$, $\frac{1}{2}$ and harder fractions, such as $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{5}$, etc. as a decimal or percentage without prompts</p>
To use measures	Length, mass and capacity	I can choose and use standard units to estimate and measure length/height (m/cm), mass (kg/g), temperature ($^{\circ}$ C) and capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	<p>With the support of a teacher and practical measuring apparatus (such as rulers, scales, thermometers and measuring vessels) I can accurately measure the following:</p> <ul style="list-style-type: none"> - length/height in cm/m - mass in kg/g - temperature in $^{\circ}$C - capacity in ml/l 	<p>Generally, by using measuring apparatus (such as rulers, scales, thermometers and measuring vessels) I can measure the following to the nearest appropriate unit:</p> <ul style="list-style-type: none"> - length/height in cm/m - mass in kg/g - temperature in $^{\circ}$C - capacity in ml/l 	<p>By using measuring apparatus (such as rulers, scales, thermometers and measuring vessels) I can measure the following to the nearest appropriate unit:</p> <ul style="list-style-type: none"> - length/height in mm/cm/m - mass in kg/g - temperature in $^{\circ}$C - capacity in ml/l <p>I can use a wider range of measures, such as right angle checker and timeline, without support</p>
		I can compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$	With the support of a teacher, I can use the signs $<$, $>$ and $=$ to order lengths, mass and volume/ capacity	Generally, I can use the signs $<$, $>$ and $=$ to compare and order lengths, mass and volume/capacity	I can independently use the signs $<$, $>$ and $=$ to compare and order lengths, mass and volume/capacity
	Money	I can recognise and use symbols for pounds (£) and pence (p); I can combine amounts to make a particular value	I recognise the symbols £ (pounds) and p (pence) and, with the support of a teacher, can use these	<p>Generally, I recognise and can use the symbols £ (pounds) and p (pence) and can combine these to make particular values</p> <p>I understand that there are 100p in £1</p>	<p>I recognise and can use the symbols £ (pounds) and p (pence) and can combine these to make particular values</p> <p>I understand that there are 100p in £1 and can use this knowledge to convert pence into pounds and pence</p>
	I can find different combinations of coins that equal the same amount of money	With the support of a teacher, I can find different combinations of coins that equal the same amount of money	Generally, I can find combinations of coins that equal the same amounts of money	I can find combinations of coins that equal the same amount of money without support	
	I can solve simple problems in a practical context involving addition and subtraction of money of the	With the support of a teacher and concrete objects, I can solve simple addition and subtraction problems	I can independently solve simple addition and subtraction problems involving money of the same unit	I can independently solve more complicated addition and subtraction problems involving	

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		same unit, including giving change	involving money of the same unit With the support of a teacher and concrete objects, I can give change	and giving change – <i>concrete objects may be needed for this</i>	pounds and pence and giving change
	Time	I can compare and sequence intervals of time	With support, I can compare and sequence intervals of time	With prompts, I can compare and sequence intervals of time	I can independently compare and sequence intervals of time
		I can tell and write the time to 5 minutes, including quarter past/to the hour and draw the hands on a clock face to show these times	With support, I can read the time to the nearest quarter of an hour; I am beginning to understand five minute intervals With the support of a teacher, I can draw the hands on a clock face to represent the time to the nearest 5 minutes	I can tell the time to the hour, half past the hour and quarter past/to the hour and I can draw the hands on a clock face to show these times With reminders, I can tell the time to five minutes and the draw the hands on a clock face to show these times	I can tell the time to the hour, half past the hour, quarter to and quarter past the hour and to five minutes and I can draw the hands on a clock face to show these times independently
		I know the number of minutes in an hour and the number of hours in a day	With reminders, I know the number of minutes in an hour and the number of hours in a day	I know the number of minutes in an hour and the number of hours in a day and can use this knowledge to solve problems	I know the number of minutes in an hour and the number of hours in a day and can use this knowledge to solve problems independently
To understand the properties of shape		I can identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	I can describe simple properties of 2-D shapes, such as side or corner I am developing my understanding of symmetry, e.g. through activities such as folding	Generally I can accurately describe 2-D shapes, including their lines of symmetry	I can independently sort and compare 2-D shapes
		I can identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	I can describe simple properties of 3-D shapes, such as the number of faces	Generally, I can accurately describe 3-D shapes, including the number of edges, vertices and faces	I can independently sort and compare 3-D shapes
		I can identify 2-D shapes on the surface of 3-D shapes	With support, I can recognise 2-D faces on the surface of 3-D shapes	Generally, I recognise 2-D faces on the surface of 3-D shapes and can use this to describe 3-D shapes	I can independently recognise 2-D faces on the surface of 3-D shapes and can use this as a criteria for sorting
		I can compare and sort common 2-D and 3-D shapes and everyday objects	I can identify simple 2-D shapes on the surface of 3-D shapes	I can sort 2-D and 3-D shapes and everyday objects using one criterion	I can sort 2-D and 3-D shapes using I can more than one criterion
To describe position,		I can order and arrange combinations of mathematical	I can copy and continue a simple pattern of objects, shapes or	Generally, I can correctly order combinations of mathematical	I can independently and correctly order and arrange combinations of

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direction and movement		objects in patterns and sequences	numbers, with support, reminders or prompts	objects in patterns and sequences I can continue sequences in regular steps I can describe the positions of objects in a row (first, second, third, etc.)	mathematical objects in patterns and sequences I can make predictions for what comes next in a pattern and give reasons for this prediction, without support
		I can use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)	Generally, I can use and respond to language such as behind, under, on top of, next to etc. Generally, I can use and respond to directional language such as forwards, backwards, turn, etc.	Generally, I can use the language half turns, quarter turns and whole turns to describe position, direction and movement; I can correctly use left and right when giving directions <i>Reminders for the use of mathematical vocabulary to describe position, direction and movement are sometimes needed.</i>	I use a good range of mathematical vocabulary; I can use the language half turns, quarter turns and whole turns to describe position, direction and movement independently; I can correctly use left, right, clockwise and anticlockwise when giving directions; I can independently use right angles in turns
To use statistics		I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables	I can construct simple pictograms, tally charts, block diagrams and tables, with support	When reminders are provided, I can construct simple pictograms, tally charts, block diagrams and simple tables	I can independently construct and interpret pictograms, tally charts, block diagrams and simple tables
		I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	I can sorting using one or two simple criteria, such as boy/girl I can sort objects into a given large-scale Venn or Carroll diagram, with support I can use objects and pictures to create simple block diagrams and pictograms, with support	Generally, I can correctly answer questions about totalling and comparing categorical data I can collect and sort data to test a simple question I understand vocabulary such as sort, group, set, table, most common and least popular	I can ask and accurately answer questions about totalling and comparing categorical data, without support I can ask questions about any information gathered for other children to answer I can use Venn and Carroll diagrams to sort and record information independently
		I can ask and answer questions about totalling and comparing categorical data	When help is provided, I can answer and ask simple questions by counting the number of objects in each category and sorting the categories by quantity	Generally, I can answer questions about results that have been gathered	I can respond to more complex questions, such as 'How many people took part in this survey?'

