

Addition and subtraction

Year 1	Year 2
Number bonds	
represent and use number bonds and related subtraction facts within 20	recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
Mental calculation	
add and subtract one-digit and two-digit numbers to 20, including zero	add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers
read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Written Methods)	show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
Written methods	
read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs (appears also in Mental Calculation)	
Inverse operations, checking and estimating answers	
	recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
Problem solving	
solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$	solve problems with addition and subtraction: <ul style="list-style-type: none"> * using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods
	<i>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change (copied from Measurement)</i>

Algebra

Year 1	Year 2
Equations	
<p><i>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as</i> $7 = \square - 9$ (copied from Addition and Subtraction)</p>	<p><i>recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.</i> (copied from Addition and Subtraction)</p>
<p><i>represent and use number bonds and related subtraction facts within 20</i> (copied from Addition and Subtraction)</p>	<p><i>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</i> (copied from Addition and Subtraction)</p>
Sequences	
<p><i>sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening</i> (copied from Measurement)</p>	<p><i>compare and sequence intervals of time</i> (copied from Measurement)</p>
	<p><i>order and arrange combinations of mathematical objects in patterns</i> (copied from Geometry: position and direction)</p>

Fractions (including decimals and percentages)

Year 1	Year 2
Counting in fractional steps	
	<p><i>Pupils should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line (Non Statutory Guidance)</i></p>
Recognising fractions	
<p>recognise, find and name a half as one of two equal parts of an object, shape or quantity</p>	<p>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</p>
<p>recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</p>	
Equivalence (including fractions, decimals and percentages)	
	<p>write simple fractions e.g. $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.</p>

Geometry: position and direction

Year 1	Year 2
Position, direction and movement	
describe position, direction and movement, including half, quarter and three-quarter turns.	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 anti-clockwise)
Pattern	
	order and arrange combinations of mathematical objects in patterns and sequences

Geometry: properties of shapes

Year 1	Year 2
Identifying shapes and their properties	
recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] * 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].	identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
	identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
	identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]
Comparing and classifying	
	compare and sort common 2-D and 3-D shapes and everyday objects

Measurement

Year 1	Year 2
Comparing and estimating	
compare, describe and solve practical problems for: <ul style="list-style-type: none"> * lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] * mass/weight [e.g. heavy/light, heavier than, lighter than] * capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] * time [e.g. quicker, slower, earlier, later] 	compare and order lengths, mass, volume/capacity and record the results using >, < and =
sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	compare and sequence intervals of time
Measuring and calculating	
measure and begin to record the following: <ul style="list-style-type: none"> * lengths and heights * mass/weight * capacity and volume * time (hours, minutes, seconds) 	choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels
recognise and know the value of different denominations of coins and notes	recognise and use symbols for pounds (£) and pence (p) ; combine amounts to make a particular value
	find different combinations of coins that equal the same amounts of money
	solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
Telling the time	
tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	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.
recognise and use language relating to dates, including days of the week, weeks, months and years	know the number of minutes in an hour and the number of hours in a day. (appears also in Converting)
Converting	
	know the number of minutes in an hour and the number of hours in a day. (appears also in Telling the Time)

Multiplication and division

Year 1	Year 2
Multiplication and division facts	
<i>count in multiples of twos, fives and tens</i> (copied from Number and Place Value)	<i>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward</i> (copied from Number and Place Value)
	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Mental calculation	
	show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
Written calculation	
	calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs
Problem solving	
solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Place value

Year 1	Year 2
Counting	
count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	
count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward
given a number, identify one more and one less	
Comparing numbers	
use the language of: equal to, more than, less than (fewer), most, least	compare and order numbers from 0 up to 100; use <, > and = signs
Identifying, estimating and representing numbers	
identify and represent numbers using objects and pictorial representations including the number line	identify, represent and estimate numbers using different representations, including the number line
Reading and writing numbers	
read and write numbers from 1 to 20 in numerals and words.	read and write numbers to at least 100 in numerals and in words
Understanding place value	
	recognise the place value of each digit in a two-digit number (tens, ones)
Problem solving	
	use place value and number facts to solve problems

Statistics

Year 1	Year 2
Interpreting, constructing and presenting data	
	interpret and construct simple pictograms, tally charts, block diagrams and simple tables
	ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
	ask and answer questions about totalling and comparing categorical data