2022 Key stage 1: Year 1 & Year 2

Number: Place Value, Addition, Subtraction, Multiplication, Division, Fractions

Measure: Length, Mass, Capacity, Time, Money, Standard Units

Geometry: Properties of shape, Position, Movement, Direction, Statistics

Statistics: Graphs

Objectives for Number KS1 : Y1 Autumn	
Number	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.
	Given a number, identify one more and one less.
	Identify and represent numbers using objects and pictorial representations including the number
	line, and use the language of: equal to, more than, less than (fewer), most, least.
	Read and write numbers from 1 to 20 in numerals and words
	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and
	equals (=) signs.
	Represent and use number bonds and related subtraction facts within 20.
	Add and subtract one-digit and two-digit numbers to 20, including zero.
	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ♦ - 9.
Measure	Recognise and name common 2D and 3D shapes, including: - 2D shapes (for example, rectangles
	(including squares), circles and triangles) - 3D shapes (for example, cuboids (including cubes),
	pyramids and spheres).

Objectives for Number KS1 : Y1 Spring	
Number	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
	Given a number, identify one more and one less
	Identify and represent numbers using objects and pictorial representations including the number
	line, and use the language of: equal to, more than, less than (fewer), most, least
	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
	Represent and use number bonds and related subtraction facts within 20
	Add and subtract one-digit and two-digit numbers to 20 including zero
	Solve 1 step problems that involve addition and subtraction, using concrete objects and pictorial
	representations, and missing number problems such as 7 = -9
Measure	Compare, describe and solve practical problems for:
	lengths and heights
	• mass/weight
	capacity and volume
	• time
	Measure and begin to record the following:
	lengths and heights      mag (weight)
	• mass/weight
	• capacity and volume
	• time (hours, minutes, seconds)
	<ul> <li>Recognise and know the value of different denominations of coins and notes</li> </ul>
Geometry	Recognise, find and name a half as one of two equal parts of an object, shape or quantity.
	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Objectives for Number KS1 : Y1 Summer	
Number	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
	Given a number, identify one more and one less
	Identify and represent numbers using objects and pictorial representations including the number
	line, and use the language of: equal to, more than, less than (fewer), most, least
	Represent and use number bonds and related subtraction facts within 20
	Solve 1 step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$
	Recognise, find and name a half as one of two equal parts of an object, shape or quantity
	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity
Measure	Sequence events in chronological order using language(eg: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening)
	Recognise and use language relating to dates, including days of the week, weeks, months and years
	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times
Geometry	Describe position, direction and movement, including whole, half, quarter and three-quarter turns

Objectives for Number KS1 : Y2 Autumn	
Number	Recognise the place value of each digit in a two-digit number (tens, ones).
	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.
	Identify, represent and estimate numbers using different representations, including the number line
	Compare and order numbers from 0 up to 100; use and = signs.
	Read and write numbers to at least 100 in numerals and in words.
	Solve problems with addition and subtraction: - using concrete objects and pictorial
	representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods.
	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
	Add and subtract numbers using concrete objects, pictorial representations, and mentally,
	including: - a two-digit number and ones a two-digit number and tens - two two-digit numbers adding three one-digit numbers.
	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.
	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.
	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.
Measure	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.

Statistics	Interpret and construct simple pictograms, tallly charts, block diagrams and simple tables
	Ask and answer simple questions by counting the number of object in each category and sorting
	the categories by quantity
	Ask and answer questions about totalling and comparing categorical data
Geometry	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 -D shapes (for example, a circle on a cylinder and a triangle on a pyramid)
	Order and arrange combinations of methematical objects in patterns and sequences
	Compare and sort common 2-D and 3-D shapes and everyday objects

Objectives for Number KS1 : Y2 Spring	
<ul> <li>Solve problems with addition and subtraction:         <ul> <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> </li> <li>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> <li>Calculate mathematical statement for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷), and equals (=) signs</li> <li>Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li> <li>Recognise, find, name and write fractions <sup>1</sup>/<sub>3</sub>, <sup>1</sup>/<sub>4</sub>, <sup>2</sup>/<sub>4</sub> and <sup>3</sup>/<sub>4</sub> of a length, shape, set of objects or quantity</li> </ul>	

	Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$
Measure	Choose and use appropriate standard units to estimate and measure length/height in any direction
	(m/cm); mass (kg/g), temperature ( $^{\circ}C$ ); capacity (litres/ml) to the nearest appropriate unit, using
	rulers, scales, thermometers and meauring vessels.
	Compare and order lengths, mass, volume/capacity and record the results using >,< and =
	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 unite, including giving change
Geometry	Order and arrange combinations of methematical objects in patterns and sequences
	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-quarer turns (clockwise and anti-clockwise)

Objectives for Number KS1 : Y2 Summer	
Number	Use place value and number facts to solve problems
	Solve problems with addition and subtraction:
	<ul> <li>using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> </ul>
	<ul> <li>applying their increasing knowledge of mental and written methods</li> </ul>
	Add and subtract numbers using concrete objects, pictorial representations, and mentally,
	including:
	<ul> <li>a two-digit number and ones</li> </ul>
	<ul> <li>a two-digit number and tens</li> </ul>
	<ul> <li>two two-digit numbers</li> </ul>
	<ul> <li>adding three one-digit numbers</li> </ul>

	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems  Recall and use multiplication and division facts for the 2, 5, and 10 multiplication tables, including recognising odd and even numbers  Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs  Show that multiplication of two numbers can be done in any order (commutative) and that division of one number by another cannot  Solve problems involving multiplication and division, using materials, arrays, repeated addition,
Measure	mental methods, and multiplication and division facts, including problems in contexts  Choose and use appropriate standard units to estimate and measure length/height in any direction $(m/cm)$ ; mass $(kg/g)$ , temperature $(\ ^{\circ}C)$ ; capacity $(litres/ml)$ to the nearest appropriate unit, using rulers, scales, thermometers and meauring vessels.
	Compare and order lengths, mass, volume/capacity and record the results using >,< and =  Compare and sequence intervals of time  Tell and write the time to five minutes, including quarter past/to the hour and ddraw the hands on a clock face to show these times.  Know the number of minutes in an hour and the number of hours in a day
	Know the number of minutes in an hour and the number of hours in a day