Year Two

It is expected that all children will take part in a daily mathematics lesson and additionally take part in 'Quick Maths' activities each day outside of the daily maths lesson. An extended problem solving lesson or investigation should be planned fortnightly.

N.B. Problem solving and reasoning should continue to be evident in everyday lesson planning when applicable – see examples given below.

Autumn 1	Weeks	Learning Outcomes
Number and Place Value	**1**	Count in multiples of 2s, 5s and 10s
	1	Recognise place value in numbers beyond 20 supported with practical resources. Recognise the place value of each digit in a two-digit number (10s, 1s)
	1	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
	1	Compare and order numbers from 0 up to 100; use <, > and = signs
	Ongoing	Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward
Fractions	**1**	Recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity Recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity
Addition & Subtraction	**1**	To add and subtract one-digit and two-digit numbers to 20 **(and beyond)**, including zero Solve addition problems involving more than two numbers/groups
	1	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
Measure	**1**	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 Compare and order lengths, mass, volume/capacity and record the results using >, < and =
Problem Solving (Fortnightly)		Use place value and number facts to solve problems
		Numicon Investigations

Autumn 2	Week	Learning Outcomes		
Number and Place Value	**1**	Read and write numbers to at least 100 in numerals and in words		
	1	Identify, represent and estimate numbers using different representations, including the number line		
Addition & Subtraction	**2**	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and 1s		
		Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and 10s		
	Ongoing	Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward		
Multiplication & Division	**2**	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs		
		Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another		
	Ongoing	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers		
Measurement	**1**	Find different combinations of coins that equal the same amounts of money		
Problem Solving (Fortnightly)		Use place value and number facts to solve problems		
		Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts		
Spring 1	Weeks	Learning Outcomes		
Number and Place Value	**On-going**	Compare and order numbers from 0 up to 100; use <, > and = signs		
Addition & Subtraction (**Continues over page**)	**3**	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: adding 3 one-digit numbers		
		Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: 2 two-digit numbers		
		Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot		
		Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number (and symbol) problems		

	Ongoing	Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward
Multiplication & Division	**Ongoing**	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Fractions	**2**	Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity
		Write simple fractions, for example ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Measurement	**1**	Find different combinations of coins that equal the same amounts of money
		Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
Problem Solving (Fortnightly)	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	
	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	
	Investigations involving fractions	

Spring 2		Learning Outcomes
Number and Place Value	**1**	Recognise the place value of each digit in a two-digit number (10s, 1s)
	Ongoing (MO starters)	Compare and order numbers from 0 up to 100; use <, > and = signs
Addition & Subtraction	**Ongoing (MO starters)**	Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward
Multiplication & Division	**Ongoing (MO starters)**	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Geometry	**1**	Identify and describe the properties of 2-D shapes, including the number of sides, and line symmetry in a vertical line
Measurement	**2**	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

Statistics	**1**	Interpret and construct simple pictograms, tally charts, block diagrams and 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
Problem Solving (Fortnightly)		To solve problems involving shapes and patterns
		To complete pattern/number investigations
		Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

Summer 1		Learning Outcomes
Number and Place Value	**Ongoing (MO starters)**	Compare and order numbers from 0 up to 100; use <, > and = signs
Addition & Subtraction	**1**	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: 2 two-digit numbers
	On-going	Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward
Multiplication & Division	**2**	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
		Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another
	Ongoing (MO starters)	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
Fractions	**1**	Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity
		write simple fractions, for example ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2

Geometry	**2**	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]
		Compare and sort common 2-D and 3-D shapes and everyday objects

Measure	**1**	Order and arrange combinations of mathematical 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-quarter turns (clockwise and anti-clockwise)
Problem Solving (Weekly)		Order and arrange combinations of mathematical objects in patterns and sequences
Summer 2		Learning Outcomes
Addition & Subtraction	**2**	Secure all addition and subtraction outcomes for Year Two materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
Multiplication and Division	**2**	Secure all multiplication and division outcomes for Year Two 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)
Measurement	**1**	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
	2	
Problem Solving (Weekly)		Solve problems with addition and subtraction including those involving numbers, quantities and measures
		Use place value and number facts to solve problems