## **Key Learning Coverage – Year 3**

This table shows where the Key Learning is explicitly taught.

Teachers should take every opportunity to combine the learning from different areas of the mathematics curriculum, for example, using a measurement context when calculating and also to revisit learning on a regular basis through Starter sessions.

Key Learning: Number and Place Value	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Count from 0 in multiples of 4, 8, 50 and 100			Wk 1 –				
			multiples				
		Wk 1 –	of 50 and				
		multiples	100		Wk 1	Wk 1	
		of 4	Wk 5 -				
			multiples				
			of 8				
Count up and down in tenths		Ongoing	in Starters	Wk 5			
Read and write numbers up to 1000 in numerals and in words	Wk 1			Wk 1			
Read and write numbers with one decimal place		Ongoing in Starters Wk 5					
Identify, represent and estimate numbers using different representations (including the number line)	Wk 1			Wk 1			
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Wk 1	Ong	ating	Wk 1			
Identify the value of each digit to one decimal place	Ongoing in Starters Wk 5						
• Partition numbers in different ways (e.g. 146 = 100+ 40+6 and 146 = 130+16)	Wk 1 Ongoing especially when calculating						
Compare and order numbers up to 1000	Wk 1	Wk 1 Ongoing in measurement and statistics					
Compare and order numbers with one decimal place		Ongoing in Starters Wk 5					
• Find 1, 10 or 100 more or less than a given number	Wk 2		ers				
Round numbers to at least 1000 to the nearest 10 or 100	Wk 1	Nk 1 Ongoing when estimating calculations					
• Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer	Ongoing when calculating and in Starters						
Describe and extend number sequences involving counting on or back in different steps		Wk 1	Wks 1 and 5		Wk 1		
Read Roman numerals from I to XII	Recommend teaching in history topic on Romans						
Solve number problems and practical problems involving these ideas	Wk 1 Ongoing						
Key Learning: Number - Addition and Subtraction	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known	Wks 2, 5			\A/I+ 2	Wks 2 and	14/l- 2	
fact, calculate mentally, use a jotting, written method)	and 6			Wk 2	5	Wk 2	
Select a mental strategy appropriate for the numbers involved in the calculation	Wks 2, 3		)A/I- 1		Wks 2 and	M/I: 2	
	and 4		Wk 1		5	Wk 2	
Understand and use take away and difference for subtraction, deciding on the most efficient method	Wks 2, 3		\A/I <sub>c</sub> 1	W/k 2	Wks 2 and	\A/I <sub>6</sub> 2	
for the numbers involved, irrespective of context	and 4		Wk 1	Wk 2	5	Wk 2	

Recall/use addition/subtraction facts for 100 (multiples of 5 and 10)	Ongoing in Starters						
Derive and use addition and subtraction facts for 100	Wks 3 and 4					Wk 2	
Derive and use addition and subtraction facts for multiples of 100 totalling 1000	Ongoing in Starters						
Add and subtract numbers mentally, including:     - a three-digit number and ones     - a three-digit number and tens     - a three-digit number and hundreds	Wks 2, 3 and 4		Wk 1		Wk 2	Wk 2	
<ul> <li>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</li> </ul>	Wk 5 + Wk 6 -			Wk 2	Wk 2		
Estimate the answer to a calculation and use inverse operations to check answers	Wks 5 and 6		Wk 1	Wk 2	Wks 2 and 5	Wk 2	
Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Wks 5 and 6			Wk 2	Wk 2		
Key Learning: Number - Multiplication and Division	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)	Ongoing when calculating						
Select a mental strategy appropriate for the numbers involved in the calculation		Wk 2 x Wk 3 ÷	Wk 3 ÷ Wks 5 and 6 x		Wk 3		
Understand that division is the inverse of multiplication and vice versa	Applied when checking the results of a calculation and linked to objective below						
Understand how multiplication and division statements can be represented using arrays			Wk 3 ÷				
Understand division as sharing and grouping and use each appropriately			Wk 3				
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables		Wk 1 – 3x and 4x	Wk 5 – 8x		Wks 1 and 3	Wk 2	
Derive and use doubles of all numbers to 100 and corresponding halves	Ongoing in Starters						
Derive and use doubles of all multiples of 50 to 500	Ongoing in Starters						
Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods		Wk 2 x Wk 3 ÷	Wk 3 ÷ Wks 5 and 6 x		Wk 3		
Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy		Wk 2 x Wk 3 ÷	Wk 3 ÷ Wks 5 and 6 x		Wk 3		

Solve problems, including missing number problems, involving multiplication and division (and interpreting remainders), including positive integer scaling problems and correspondence problems in which n objects are connected to m objects		Wk 2 x Wk 3 ÷	Wk 6		Wk 3		
Key Learning: Number - Fractions	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
• Show practically or pictorially that a fraction is one whole number divided by another (e.g. $\frac{3}{4}$ can be interpreted as $3 \div 4$ )			Wk 2	Wk 3		Wk 3	
Understand that finding a fraction of an amount relates to division			Wks 2 and 3	Ongoing	to division		
<ul> <li>Recognise that tenths arise from dividing objects into 10 equal parts and in dividing one-digit numbers or quantities by 10</li> </ul>					Wk 5		
Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators			Wks 2 and 3			Wk 3	
Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators			Wk 2			Wk 3	
Recognise and show, using diagrams, equivalent fractions with small denominators				Wk 3		Wk 3	
• Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ ]				Wk 3			
Compare and order unit fractions, and fractions with the same denominators (including on a number line)	Or	ngoing in Start	ers	Wk 3			
• Count on and back in steps of $\frac{1}{2}$ , $\frac{1}{4}$ and $\frac{1}{3}$	Ongoing in Starters						
Solve problems that involve all of the above				Wk 3			
Key Learning: Measurement	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Wk 3 – length		Wk 4 – volume and capacity and mass		Wk 2	Wk 4	
Continue to estimate and measure temperature to the nearest degree (°C) using thermometers	Ongoing in Starters						
Understand perimeter is a measure of distance around the boundary of a shape	Wk 3				Wk 2	Wk 4	
Measure the perimeter of simple 2-D shapes	Wk 3				Wk 2	Wk 4	
Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks		Wk 4		Wk 5			
Estimate/read time with increasing accuracy to the nearest minute		Wk 4		Wk 5			
<ul> <li>Record/compare time in terms of seconds, minutes, hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon, midnight</li> </ul>		Wk 4		Wk 5			
Know the number of seconds in a minute and the number of days in each month, year and leap year		Wk 4		Wk 5			
Compare durations of events [for example to calculate the time taken by particular events or tasks]				Wk 5			
Continue to recognise and use the symbols for pounds (£) and pence (p) and understand that the decimal point separates pounds/pence	Ongoing when solving problems involving money						

• Recognise that ten 10p coins equal £1 and that each coin is $\frac{1}{10}$ of £1	Ongoing when solving problems involving money						
Add and subtract amounts of money to give change, using both £ and p in practical contexts					Wk 5		
Solve problems involving money and measures and simple problems involving passage of time		Wks 2, 3 and 4	Wk 4 Wk 6	Wk 5	Wks 2, 3 and 5	Wks 1, 2 and 3	
Key Learning: Geometry - Properties of Shape	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
<ul> <li>Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</li> </ul>	Wk 3 – 2-D	Wk 5 – 3-D		Wk 1	Wk 4 – 2-D Wk 6 – 3-D		
Recognise angles as a property of shape or a description of a turn	Wk 3			Wk 1	Wk 4		
• Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle				Wk 1	Wk 4		
Identify horizontal and vertical lines and pairs of perpendicular and parallel lines		Wk 5		Wk 1	Wk 4		
Key Learning: Geometry - Position and Direction	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Describe positions on a square grid labelled with letters and numbers				Wk 4			
Key Learning: Statistics	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
<ul> <li>Use sorting diagrams to compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects</li> </ul>		Wks 1 and 5	Wk 5	Wk 1	Wks 4 and 6		
Interpret and present data using bar charts, pictograms and tables	Wk 4				Wk 1	Wk 5	
<ul> <li>Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables</li> </ul>	Wk 4			Wk 2		Wk 5	