Key Learning Coverage – Year 4

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 in multiples of 6, 7, 9, 25 and 1000		Wk 1 – 6 and 9	Wk 1 – 6, 8, 25 and 1000	Wk 3 - 7	Wk 1	
• Count backwards through zero to include negative numbers			Wk 1		Wk 1	
• Count up and down in hundredths	Wk 2				Wk 1	
• *Read and write numbers to at least 10 000*	Wk 1	Ongoing				
• *Read and write numbers with up to two decimal places*	Wk 2	Ongoing				
• Recognise the place value of each digit in a four-digit number	Wk 1			Wk 2		Wk 1
• *Identify the value of each digit to two decimal places*	Wk 2			Wk 2	Wk 2	
• *Partition numbers in different ways (e.g. 2.3 = 2+0.3 & 1+1.3)*	Wks 3 and 4	Wk 2	Ongoing particularly when selecting the most appropriate method of calculation			Wk 4
• Identify, represent and estimate numbers using different representations *(including the number line)*	Wk 1			Wk 2		Wk 1
• Order and compare numbers beyond 1000	Wk 1			Wk 2		Wk 1
• *Order and* compare numbers with the same number of decimal places up to two decimal places	Wk 2	Ongoing in Starters			Wk 2	
• Find *0.1, 1, 10, 100 or* 1000 more or less than a given number	Wk 1			Wk 2		
• Round any number to the nearest 10, 100 or 1000	Wk 1			Wk 2		Wk 1
• Round decimals (one decimal place) to the nearest whole number	Wk 2				Wk 2	
• Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer	Wk 2				Wk 2	
• *Describe and extend number sequences involving counting on or back in different steps, including sequences with multiplication and division steps*			Wk 1		Wks 1 and 6	
• Read Roman numerals to 100 and know that over time, the numeral system changed to include the concept of zero and place value			Wk 1	Ongoing in Starters		
• Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Wk 1			Wk 2		Wk 1
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 fact, calculate mentally, use a jotting, written method)*	Wks 3 and 4		Wk 6			Wk 3
• *Select a mental strategy appropriate for the numbers involved in the calculation*	Wks 3 and 4	Ongoing when calculating and in Starters				Wk 3
• *Recall and use addition and subtraction facts for 100*	Ongoing when calculating and in Starters					

• *Recall and use +/- facts for multiples of 100 totalling 1000*	Ongoing when calculating and in Starters					
• *Derive and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place)*	Ongoing when calculating and in Starters					
• *Add and subtract mentally combinations of two and three digit numbers and decimals to one decimal place*	Wk 4	Ongoing when calculating and in Starters				
• Add and subtract numbers with up to 4 digits *and decimals with one decimal place* using the formal written methods of columnar addition and subtraction where appropriate	Wks 3 and 4		Wk 6	Wk 5		Wk 3
• Estimate; use inverse operations to check answers to a calculation	Wks 3 and 4		Wk 6			Wk 3
• Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Wk 4		Wk 6			Wk 3
• *Solve addition and subtraction problems involving missing numbers*	Ongoing when calculating and in Starters					
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)*		Wk 3		Wks 1 and 3		Wk 4
• *Select a mental strategy appropriate for the numbers involved in the calculation*		Wks 1 and 2	Wk 3	Wk 1		Wk 4
• Recognise and use factor pairs and commutativity in mental calculations		Wk 1		Wk 1		Wk 4
• Recall multiplication and division facts for multiplication tables up to 12 × 12		Wks 1 and 2 – 6x and 9x		Wk 1 – 7x and 11x	Wk 6 – 12x	
• *Use partitioning to double or halve any number, including decimals to one decimal place*		Wk 1		Wk 1		
• Use place value, known and derived facts to multiply and divide mentally, including: - multiplying by 0 and 1 - dividing by 1 - multiplying together three numbers		Wk 1 x Wk 2 ÷		Wk 1		Wk 4
• Multiply two-digit and three-digit numbers by a one-digit number using formal written layout		Wk 3		Wk 3		Wk 4
• *Divide numbers up to 3 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context*	Link to finding fractions of amounts			Wk 1	Wk 3	
• *Use estimation and inverse to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy*		Wk 3	Wk 3	Wks 1 and 3		Wk 4
• Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, *division (including interpreting remainders),* integer scaling problems and harder correspondence problems such as n objects are connected to m objects		Wk 3 x		Wk 3		Wk 4
Key Learning: Number - Fractions	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
• *Understand that a fraction is one whole number divided by another (e.g. $\frac{3}{4}$ can be interpreted as 3 ÷ 4)*			Wk 2		Wk 3	
• *Recognise, find and write fractions of a discrete set of objects including those with a range of numerators and denominators*			Wk 3	Link to division in context		

• Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	Wk 2					
• *Count on and back in steps of unit fractions*			Wk 2	Ongoing in Starters		
• *Compare and order unit fractions and fractions with the same denominators (including on a number line)*			Wk 2	Ongoing in Starters		
• Recognise and show, using diagrams, families of common equivalent fractions			Wk 2	Ongoing in Starters		
• Recognise and write decimal equivalents of any number of tenths or hundredths			Wk 2		Wk 2	
• Recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$			Wk 2		Wk 2	
• Add and subtract fractions with the same denominator *(using diagrams)*			Wk 2	Ongoing in Starters		
• Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number			Wk 3		Wk 3	
• Solve simple measure and money problems involving fractions and decimals to two decimal places			Wk 3		Wk 2	
Key Learning: Measurement	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
• Estimate, compare and calculate different measures, including money in pounds and pence		Wk 4 - length			Wk 4 – perimeter, volume and capacity and mass	
• *Order temperatures including those below 0°C*			Wk 1	Ongoing in Starters		
• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres		Wk 4			Wk 4	
• *Know area is a measure of surface within a given boundary*			Wk 5		Wk 5	
• Find the area of rectilinear shapes by counting squares			Wk 5		Wk 5	
• Convert between different units of measure [e.g. kilometre to metre; hour to minute]		Wk 4 - length			Wk 2	
• Read, write and convert time between analogue and digital 12- and 24-hour clocks	Wk 6				Wk 6	
• *Write amounts of money using decimal notation*	Wk 2	Ongoing in problem solving contexts				
• *Recognise that one hundred 1p coins equal £1 and that each coin is $\frac{1}{100}$ of £1*	Wk 2					
• Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days *and problems involving money and measures*	Wk 6	Link to multiplication and division			Wk 6 - time	
Key Learning: Geometry - Properties of Shape	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Wk 5			Wk 4		Wk 5
• Identify lines of symmetry in 2-D shapes presented in different orientations	Wk 5			Wk 4		Wk 5

• Complete a simple symmetric figure with respect to a specific line of symmetry			Wk 4		Wk 5	Wk 5
• *Continue to identify horizontal and vertical lines and pairs of perpendicular and parallel lines*	Wk 5			Wk 4		Wk 5
• Identify acute and obtuse angles and compare and order angles up to two right angles by size	Wk 5			Wk 4		Wk 5
Key Learning: Geometry - Position and Direction	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
• Describe positions on a 2-D grid as coordinates in the first quadrant			Wk 4	Wk 4	Wk 5	
• Plot specified points and draw sides to complete a given polygon			Wk 4	Wk 4	Wk 5	
• Describe movements between positions as translations of a given unit to the left/right and up/down			Wk 4		Wk 5	
Key Learning: Statistics	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
• *Use a variety of sorting diagrams to* compare and classify *numbers and* geometric shapes based on their properties and sizes	Wk 5			Wk 4		Wk 5
• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts, time graphs		Wk 5		Wk 5		Wk 2
• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs		Wk 5		Wk 5		Wks 2 and 3