Year 4

Place Value	Read and writing numbers and recognising the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	identify, represent and estimate numbers using different representations	order and compare numbers beyond 1000	read, write and compare numbers with the same number of decimal places up to two decimal places	recognise and write decimal equivalents of any number of tenths or hundredths eg 7/10 = 0.7	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	find 1000 more or less than a given number	round any number to the nearest 10, 100 or 1000	round decimals with one decimal place to the nearest whole number	find the effect of multiplying and dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	estimate, compare and calculate different measures, including money in pounds and pence	Convert between different metric units of measure [for example, kilometre to metre]	solve number and practical problems that involve all of the above and with increasingly large positive numbers	count backwards through zero to include negative numbers	read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	count in multiples of 6, 7, 9, 25 and 1000
Addition and Subtraction	add and subtract numbers mentally with increasingly large numbers using Year 4 mental calculation strategies	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	estimate and use inverse operations to check answers to a calculation	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	solve simple measure and money problems involving decimals to two decimal places.										
Multiplication and Division	recall and use multiplication and division facts for the 2, 5 and 10 multiplication (Y2) tables	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables (Y3)	recall multiplication and division facts for multiplication tables up to 12 × 12	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	recognise and use factor pairs and commutativity in mental calculations	*practise mental methods and extend this to three-digit numbers to derive facts, (for example 600 ÷ 3 = 200 can be derived from 2 x 3 = 6).*	multiply two-digit and three-digit numbers by a one-digit number using formal written layout	solve problems involving multiplying and adding, including using the distributive law (for example, use the distributive law 39 × 7 = 30 × 7 + 9 × 7 and associative law (2 × 3) × 4 = 2 × (3 × 4)) to multiply two digit numbers by one digit, integer scaling	*combine knowledge of number facts and rules of arithmetic to solve mental and written calculations for example, 2 x 6 x 5 = 10 x 6 = 60.*						

Fractions	find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths (PV)	compare numbers with the same number of decimal places up to two decimal places (PV)	round decimals with one decimal place to the nearest whole number (PV)	recognise and write decimal equivalents of any number of tenths or hundredths eg 7/10 = 0.7	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten	recognise and show, using diagrams, families of common equivalent fractions	recognise and write decimal equivalents to 1/4, 1/2, 3/4	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	add and subtract fractions with the same denominator	solve simple measure and money problems involving fractions and decimals to two decimal places.
Algebra	N/A									
Measurement	Convert between different units of measure [for example, kilometre to metre; hour to minute] using multiplication to convert from larger to smaller units	measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	find the area of rectilinear shapes by counting squares	estimate, compare and calculate different measures, including money in pounds and pence	**Read, write and convert between analogue and digital 12 and 24 hour clocks (**Ongoing throughout the year)	Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.				
Ratio and Proportion	N/A									

Geometry	compare and classify geometric shapes, including quadrilaterals (eg: parallelogram, rhombus, trapezium) and triangles, (isosceles, equilateral, scalene) based on their properties and sizes	identify acute and obtuse angles and compare and order angles up to two right angles by size	identify lines of symmetry in 2-D shapes presented in different orientations	complete a simple symmetric figure with respect to a specific line of symmetry.	describe positions on a 2-D grid as coordinates in the first quadrant	describe movements between positions as translations of a given unit to the left/right and up/down	plot specified points and draw sides to complete a given polygon.
Statistics	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.					