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Strand	Statutory Objectives	Non Statutory
Number – number and place value	Count from 0 in multiples of 4, 8, 50 and 100	Pupils now use multiples of 2, 3, 4, 5, 8, 10, 50 and 100.
	Find 10 or 100 more or less than a given number	
	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Use larger numbers to at least 1000, applying partitioning related to place value. E.g. 146 = 100 + 40 and 6, 146 = 130 + 16).
	Compare and order numbers up to 1000	Using a variety of representations, including those related to measure, pupils continue to count in ones, tens and hundreds, so that they become fluent in the order and place value of numbers to 1000.
	Identify, represent and estimate numbers using different representations	
	Read and write numbers up to 1000 in numerals and in words	
	Solve number problems and practical problems involving these ideas	

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Number – addition and subtraction	<u>add and subtract numbers mentally, including:</u> • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds	Pupils practise solving varied addition and subtraction questions. For mental calculations with two-digit numbers, the answers could exceed 100.
	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Recording addition and subtraction in columns supports place value and prepares for formal written methods with larger numbers.
	Estimate the answer to a calculation and use inverse operations to check answers	
	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Pupils use their understanding of place value and partitioning, and practise using columnar addition and subtraction with increasingly large numbers up to three digits to become fluent
	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	
Number – multiplications and division	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables

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	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	Pupils develop efficient mental methods, for example, using commutativity and associativity (for example, 4 × 12 × 5 = 4 × 5 × 12 = 20 × 12 = 240) and multiplication and division facts (for example, using 3 × 2 = 6, 6 ÷ 3 = 2 and 2 = 6 ÷ 3) to derive related facts (for example, 30 × 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷ 3).
	Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	Pupils develop reliable written methods for multiplication and division, starting with calculations of two-digit numbers by one-digit numbers and progressing to the formal written methods of short multiplication and division.
		Pupils solve simple problems in contexts, deciding which of the four operations to use and why. These include measuring and scaling contexts, (for example, four times as high, eight times as long etc.) and correspondence problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits?; 12 sweets shared equally between 4 children; 4 cakes shared equally between 8 children).
Number – fractions	Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10	Pupils connect tenths to place value, decimal measures and to division by 10

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	Recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators	They begin to understand unit and non-unit fractions as numbers on the number line, and deduce relations between them, such as size and equivalence. They should go beyond the [0, 1] interval, including relating this to measure.
	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	Pupils understand the relation between unit fractions as operators (fractions of), and division by integers.
	Recognise and show, using diagrams, equivalent fractions with small denominators	
	Add and subtract fractions with the same denominator within one whole e.g. 5/7 + 1/7 = 6/7	They continue to recognise fractions in the context of parts of a whole, numbers, measurements, a shape, and unit fractions as a division of a quantity.
	Compare and order unit fractions, and fractions with the same denominators	
	Solve problems that involve all of the above.	Pupils practise adding and subtracting fractions with the same denominator through a variety of increasingly complex problems to improve fluency.
Measurement	<u>measure, compare, add and subtract</u> • lengths and heights in any direction (m/cm/mm) • mass (kg/g) using scales	Pupils continue to measure using the appropriate tools and units, progressing to using a wider range of measures, including comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm).

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	Volume/Capacity (ml/l) using vessels	The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication.
	measure the perimeter of simple 2-D shapes	
	add and subtract amounts of money to give change, using both £ and p in practical contexts	
	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	Pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately.
	Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight money of the same unit, including giving change	
	Know the number of seconds in a minute and the number of days in each month, year and leap year	Pupils use both analogue and digital 12-hour clocks and record their times.
	Compare durations of events [for example to calculate the time taken by particular events or tasks].	

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	Know the number of minutes in an hour and the number of hours in a day.	
Geometry – properties of shape	Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	Pupils' knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedra.
	Recognise angles as a property of shape or a description of a turn	Pupils extend their use of the properties of shapes. They should be able to describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.
	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	Pupils connect decimals and rounding to drawing and measuring straight lines in centimetres, in a variety of contexts.
	Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	
Statistics	Interpret and present data using bar charts, pictograms and tables	Pupils understand and use simple scales (for example, 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy.
	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.	They continue to interpret data presented in many contexts.