



Maths Progression 2024

	Number				Measurement	Geometry		Statistics	Ratio and proportion	Algebra
	Place Value	Addition and Subtraction	Multiplication and Division	Fractions, Decimals and Percentages		Properties of shapes	Position and Direction			
1	<p>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.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Given a number, identify one</p>	<p>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.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Read, write and interpret mathematical statements involving</p>	<p>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.</p> <p>Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</p>	<p>Recognise, find and name a half as one of two equal parts of an object, shape or quantity</p>	<p>Compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half].</p> <p>Measure and begin to record the following: lengths and heights.</p> <p>Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than].</p>	<p>Recognise and name common 2D and 3D shapes, including: 3D shapes [for example, cuboids (including cubes), pyramids and spheres].</p>	<p>Describe position, direction and movement, including whole, half, quarter and three-quarter turns.</p> <p>Non-statutory guidance: Pupils use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of,</p>			

<p>more and one less.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number (to 20).</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Recognise the place value of each digit in a two-digit number (tens, ones).</p> <p>Given a number, identify one</p>	<p>addition (+), subtraction (–) and equals (=) signs.</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p>	<p>Non-statutory guidance: Through grouping and sharing small quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities.</p>		<p>Measure and begin to record the following: mass/weight.</p> <p>Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter].</p> <p>Measure and begin to record the following: capacity and volume.</p> <p>Recognise and know the value of different denominations of coins and notes.</p> <p>Sequence events in chronological order using language [for</p>		<p>above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.</p> <p>Non-statutory guidance: Pupils practise counting (1, 2, 3...), ordering (for example, first, second, third...), and to indicate a quantity (for example, 3 apples, 2 centimetres), including solving simple concrete problems, until they are fluent.</p>				
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<p>more and one less.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number (to 20).</p> <p>Read and write numbers from 1 to 20 in numerals and words.</p> <p>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</p> <p>Count, read and write numbers to 100 in numerals; count in multiples of</p>				<p>example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].</p> <p>Recognise and use language relating to dates, including days of the week, weeks, months and years.</p> <p>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</p>					
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	twos, fives and tens. Given a number, identify one more and one less. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.									
	Number				Measurement	Geometry		Statistics	Ratio and Proportion	Algebra
	Place Value	Addition and Subtraction	Multiplication and Division	Fractions, Decimals and Percentages		Properties and Shapes	Position and Direction			
2	Recognise the place value of each digit in a two-digit number (tens, ones). Identify, represent and estimate numbers using different	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Add and subtract numbers using	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental	Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ of a length, shape, set of objects or quantity.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations	Compare and sort common 2D and 3D shapes and everyday objects. Identify and describe the properties of 2D shapes,	Use mathematical vocabulary to describe position, direction and movement, including movement	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.		

<p>representation s, including the number line.</p> <p>Read and write numbers to at least 100 in numerals and in words.</p> <p>Compare and order numbers from 0 up to 100; use and = signs.</p> <p>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.</p> <p>Use place value and number facts to solve problems.</p>	<p>concrete objects, pictorial representations, and mentally, including: a two-digit number and ones.</p> <p>Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures.</p> <p>Solve problems with addition and subtraction: applying their increasing knowledge of mental and written methods.</p>	<p>methods, and multiplication and division facts, including problems in contexts.</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs.</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.</p> <p>Solve problems involving</p>	<p>Write simple fractions [for example, $\frac{1}{2}$ of $6 = 3$] and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$</p> <p>Non-statutory guidance: Pupils should count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line (for example, $1\frac{1}{4}$, $1\frac{2}{4}$ (or $1\frac{1}{2}$), $1\frac{3}{4}$, 2).</p>	<p>of coins that equal the same amounts of money.</p> <p>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.</p> <p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.</p>	<p>including the number of sides and line symmetry in a vertical line.</p> <p>Order and arrange combinations of mathematical objects in patterns and sequences.</p> <p>Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.</p> <p>Compare and sort common 2D and 3D shapes and everyday objects.</p> <p>Order and arrange combinations of mathematical</p>	<p>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).</p> <p>Order and arrange combinations of mathematical objects in patterns and sequences.</p>	<p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</p> <p>Ask and answer questions about totalling and comparing categorical data.</p>		
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	<p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: two two-digit numbers.</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: adding three one-digit numbers.</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a</p>	<p>multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>		<p>Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$.</p> <p>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.</p> <p>Know the number of minutes in an hour and the number of hours in a day.</p>	<p>objects in patterns and sequences.</p>				
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		<p>two-digit number and ones.</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: two two-digit numbers.</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and tens.</p> <p>Recall and use addition and subtraction facts to 20 fluently, and</p>								
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	<p>derive and use related facts up to 100.</p> <p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</p> <p>Use place value and number facts to solve problems.</p> <p>Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures.</p>								
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		Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.								
		Use place value and number facts to solve problems								
	Number				Measurement	Geometry		Statistics	Ratio and proportion	Algebra
	Place Value	Addition and Subtraction	Multiplication and Division	Fractions, Decimals and Percentages		Properties of shapes	Position and Direction			
3	Recognise the place value of each digit in a two-digit number (10s, 1s). Identify, represent and	Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number	Write and calculate mathematical statements for multiplication and division using the multiplication tables that	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).	Recognise angles as a property of shape or a description of a turn. Identify right angles,		Interpret and present data using bar charts, pictograms and tables. Solve one-step and		

<p>estimate numbers using different representations, including the number line.</p> <p>Compare and order numbers up to 1,000.</p> <p>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.</p> <p>Recognise the place value of each digit in a three-digit number (100s, 10s, 1s).</p> <p>Identify, represent and estimate numbers using different representations.</p> <p>Recognise the place value of each digit in a</p>	<p>and tens, a three-digit number and hundreds.</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</p> <p>Add and subtract numbers mentally, including: a three-digit number and</p>	<p>they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.</p> <p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.</p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are</p>	<p>denominator s.</p> <p>Compare and order unit fractions, and fractions with the same denominator s.</p> <p>Recognise and show, using diagrams, equivalent fractions with small denominator s.</p> <p>Add and subtract fractions with the same denominator within one whole (for example, $5/7 + 1/7 = 6/7$)</p> <p>Solve problems that involve all of the above.</p>	<p>Measure the perimeter of simple 2D shapes</p> <p>Add and subtract amounts of money to give change, using both £ and p in practical contexts.</p> <p>Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.</p> <p>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,</p>	<p>recognise that two right angles make a half-turn, three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.</p> <p>Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.</p> <p>Identify horizontal and vertical lines and pairs of perpendicular and parallel lines</p>	<p>two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.</p>			
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<p>three-digit number (100s, 10s, 1s).</p> <p>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.</p> <p>Compare and order numbers up to 1,000.</p> <p>Identify, represent and estimate numbers using different representations, including the number line.</p>	<p>ones, a three-digit number and tens, a three digit number and hundreds</p> <p>Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.</p> <p>Estimate the answer to a calculation and use inverse operations to check answers.</p>	<p>connected to m objects.</p> <p>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.</p>	<p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.</p>	<p>a.m./p.m., morning, afternoon, noon and midnight</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year</p> <p>Compare durations of events [for example to calculate the time taken by particular events or tasks].</p>					
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		Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.								
	Number				Measurement	Geometry		Statistics	Ratio and Proportion	Algebra
	Place Value	Addition and Subtraction	Multiplication and Division	Fractions, Decimals and Percentages		Properties of Shape	Position and Directions			
4	<p>Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s).</p> <p>Count in multiples of 6, 7, 9, 25 and 1,000.</p> <p>Identify, represent and estimate numbers using different</p>	<p>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.</p> <p>Solve number and practical problems that involve all of the above and</p>	<p>Recall multiplication and division facts for multiplication tables up to 12×12.</p> <p>Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1;</p>	<p>Non-statutory guidance: They practise counting using simple fractions and decimals, both forwards and backwards</p> <p>Recognise and use fractions as numbers: unit fractions and non-unit</p>	<p>Find the area of rectilinear shapes by counting squares.</p> <p>Estimate, compare and calculate different measures, including money in pounds and pence.</p> <p>Convert between</p>	<p>Identify acute and obtuse angles and compare and order angles up to two right angles by size.</p> <p>Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.</p>	<p>Describe positions on a 2D grid as coordinates in the first quadrant.</p> <p>Plot specified points and draw sides to complete a given polygon.</p> <p>Describe movements between</p>	<p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</p> <p>Solve comparison, sum and difference problems using</p>		

<p>representation s.</p> <p>Find 1,000 more or less than a given number.</p> <p>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.</p> <p>Count in multiples of 6, 7, 9, 25 and 1000.</p> <p>Order and compare numbers beyond 1,000.</p> <p>Round any number to the nearest 10, 100 or 1,000.</p>	<p>with increasingly large positive numbers.</p> <p>Estimate and use inverse operations to check answers to a calculation.</p> <p>Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>	<p>dividing by 1; multiplying together three numbers.</p> <p>Recognise and use factor pairs and commutativity in mental calculations.</p> <p>Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects</p> <p>Multiply two-digit and three-digit</p>	<p>fractions with small denominators.</p> <p>Ready to progress criteria (4F–1): Reason about the location of mixed numbers in the linear number system.</p> <p>Compare and order unit fractions, and fractions with the same denominators.</p> <p>Ready to progress criteria (4F–2): Convert mixed numbers to improper fractions and vice versa.</p> <p>Recognise and show,</p>	<p>different units of measure [for example, kilometre to metre; hour to minute]</p> <p>Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.</p> <p>Estimate, compare and calculate different measures, including money in pounds and pence.</p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute].</p>	<p>Identify lines of symmetry in 2D shapes presented in different orientations.</p> <p>Complete a simple symmetric figure with respect to a specific line of symmetry.</p>	<p>positions as translations of a given unit to the left/right and up/down.</p>	<p>information presented in bar charts, pictograms, tables and other graphs.</p>		
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			<p>numbers by a one-digit number using formal written layout</p> <p>Recognise and use factor pairs and commutativity in mental calculations.</p>	<p>using diagrams, equivalent fractions with small denominators.</p> <p>Recognise and show, using diagrams, families of common equivalent fractions</p> <p>Add and subtract fractions with the same denominator.</p> <p>Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions</p>						
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where the answer is a whole number.

Recognise and write decimal equivalents of any number of tenths or hundredths.

Find the effect of dividing a one- or twodigit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Compare numbers with the same number of decimal places up to two decimal places.

				Round decimals with one decimal place to the nearest whole number. Recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$.						
Number				Measurement	Geometry		Statistics	Ratio and Proportion	Algebra	
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5	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.	Add and subtract numbers mentally with increasingly large numbers. Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar	Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Know and use the vocabulary of prime numbers, prime factors and composite	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper	Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres Calculate and compare the area of rectangles (including squares), and including using standard units,	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Identify: angles at a point and one whole turn (total 360°); angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°);	Describe positions on a 2D grid as coordinates in the first quadrant. Plot specified points and draw sides to complete a given polygon. Identify, describe and	Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables, including timetables.		

<p>Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.</p> <p>Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.</p> <p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.</p>	<p>addition and subtraction).</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p>Estimate and use inverse operations to check answers to a calculation.</p> <p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p>	<p>(non-prime) numbers.</p> <p>Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000.</p> <p>Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two-digit numbers.</p> <p>Multiply and divide numbers</p>	<p>fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$].</p> <p>Compare and order fractions whose denominators are all multiples of the same number.</p> <p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</p> <p>Read, write, order and</p>	<p>square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.</p> <p>Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].</p> <p>Understand and use approximate equivalences between metric units and common imperial units such as inches,</p>	<p>other multiples of 90°.</p> <p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>Draw given angles, and measure them in degrees (°).</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p> <p>Identify horizontal and vertical lines</p>	<p>represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.</p>			
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			<p>mentally drawing upon known facts</p> <p>Divide numbers up to 4 digits by a one digit number using the formal written method of short division and interpret remainders appropriately for the context</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p>	<p>compare numbers with up to three decimal places.</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p>Read, write, order and compare numbers with up to three decimal places.</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place.</p> <p>Recognise the per cent</p>	<p>pounds and pints</p> <p>Solve problems involving converting between units of time.</p> <p>Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</p> <p>Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water].</p>	<p>and pairs of perpendicular and parallel lines</p> <p>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</p>				
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				<p>symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.</p> <p>Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{2}{5}$ $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.</p> <p>Solve problems involving number up to</p>						
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				<p>three decimal places.</p> <p>Read, write, order and compare numbers with up to three decimal places.</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p>Solve problems involving number up to three decimal places.</p>						
	Number			Measurement	Geometry		Statistics	Ratio and Proportion	Algebra	
	Place Value	Addition and Subtraction Multiplication and Division	Fraction, Decimals and Percentages		Properties of Shapes	Position and Direction				

6	<p>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</p> <p>Solve number and practical problems.</p> <p>Round any whole number to a required degree of accuracy.</p> <p>Use negative numbers in context, and calculate intervals across zero.</p>	<p>Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p> <p>Identify common factors, common multiples and prime numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations</p> <p>Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).</p> <p>Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.</p> <p>Divide numbers up to 4 digits by a twodigit number using the formal written method of short division where appropriate, interpreting remainders according to the context.</p> <p>Divide numbers up to 4 digits by a twodigit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by</p>	<p>Use common factors to simplify fractions; use common multiples to express fractions in the same denominator.</p> <p>Compare and order fractions, including fractions > 1.</p> <p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</p> <p>Multiply proper fractions and mixed numbers by whole numbers,</p>	<p>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places</p> <p>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</p>	<p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.</p> <p>Draw 2D shapes using given dimensions and angles.</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference,</p>	<p>Describe positions on the full coordinate grid (all four quadrants).</p> <p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p> <p>Solve number and practical problems that involve all of the above.</p>	<p>Interpret and construct pie charts and line graphs and use these to solve problems</p> <p>Non-statutory guidance: Pupils connect their work on angles, fractions and percentages to the interpretation of pie charts.</p> <p>Calculate and interpret the mean as an average.</p>	<p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found</p> <p>Solve problems involving the relative sizes of two quantities where missing values can</p>	<p>Generate and describe linear number sequences</p> <p>Express missing number problems algebraically</p> <p>Use simple formulae.</p> <p>Find pairs of numbers that satisfy an equation with two unknowns.</p> <p>Enumerate possibilities of combinations of two variables.</p>
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	<p>rounding, as appropriate for the context.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>	<p>supported by materials and diagrams.</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example $1/4 \times 1/2 = 1/8$].</p> <p>Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$].</p> <p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</p> <p>Use written division methods in</p>	<p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</p> <p>Convert between miles and kilometres.</p> <p>Recognise that shapes with the same areas can have different perimeters and vice versa.</p> <p>Calculate the area of parallelograms and triangles</p> <p>Recognise when it is possible to use formulae for area and volume of shapes.</p>	<p>and know that the diameter is twice the radius</p> <p>Recognise, describe and build simple 3D shapes, including making nets.</p> <p>Describe positions on the full coordinate grid (all four quadrants).</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown</p>			<p>be found by using integer multiplication and division facts.</p> <p>Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.</p>	
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			<p>cases where the answer has up to two decimal places.</p> <p>Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy.</p> <p>Identify the value of each digit in numbers given to</p>	<p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].</p> <p>Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</p>	<p>angles in any triangles, quadrilaterals, and regular polygons.</p>				
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three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.

Multiply one-digit numbers with up to two decimal places by whole numbers.

Use written division methods in cases where the answer has up to two decimal places.

Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a

			<p>simple fraction [for example, $\frac{3}{8}$].</p> <p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</p> <p>Compare and order fractions, including fractions > 1.</p>						
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