



Intent

“Without mathematics, there is nothing you can do. Everything around you is mathematics. Everything around you is numbers.” Shakuntala Devi

At Fairfield Spencer Academy, we believe that mathematics is an interconnected subject that is essential to everyday life. It is critical to science, technology and engineering, as well being necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a solid foundation for understanding the world around us. We want all pupils at Fairfield to feel confident and be fluent in mathematics and want to provide opportunities for them to experience the beauty, power and creativity of maths whilst developing a sense of curiosity about the subject.

At Fairfield, we want our mathematicians to foster positive attitudes and we promote the fact that ‘We CAN do!’ We believe all children can achieve in mathematics and our teaching aims to achieve secure and deep understanding of mathematical concepts through manageable progressive steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems.

At Fairfield, we have adopted a ‘Teaching for Mastery’ approach in order to deliver a high-quality and ambitious maths curriculum meeting the aims of the National Curriculum. We aspire for all to become masters of maths whilst embedding a growth mindset approach to maths which focuses on ensuring all children build an understanding of the different mathematical concepts. We believe in the mastery approach where children are taught as a whole-class and encouraged to master each year group’s content through activities that either strengthen or deepen their knowledge. We encourage collaborative learning as we know that shared sustained thinking produces team-working skills, divides the task and multiplies successes.

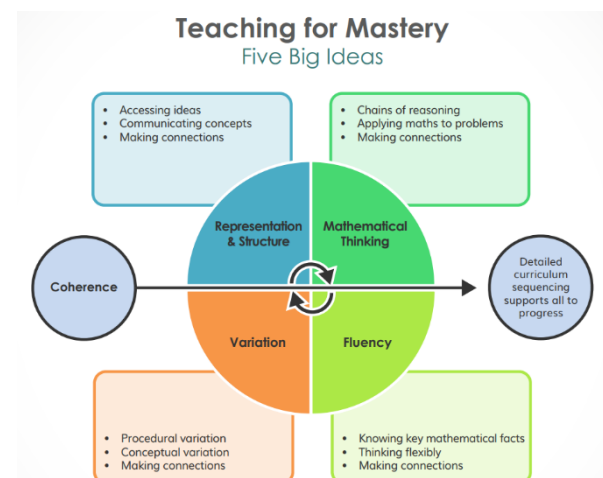
Children will also draw inspiration from the local communities and careers, where maths is interweaved in all aspects of life. This enables children to see mathematics as not just a curriculum subject but as a life skill that they will use beyond the classroom. At the end of their time at Fairfield, we strive to ensure that every child has all the necessary knowledge and skills to be successful mathematicians in the next stage of their educational journey.

Working mathematically – I am a Fairfield mathematician because....				
				
... I demonstrate quick and efficient recall of facts and procedures.	...I am a mathematical thinker, who reasons and solves problems.	...I feel confident using mathematical vocabulary.	...I can describe, explain and represent mathematical concepts in a variety of ways (concrete, pictorial, abstract)	...I can make connections in my learning to new ideas within the world and the world around me.

Implementation:

From Y1 to Y6, we follow the 'Maths No Problem' scheme, designed to spark curiosity and excitement and nurture confidence in mathematics. 'Maths No Problem' enables key concepts to be studied in depth and revisited regularly to ensure depth in understanding through the mastery approach. Each lesson is underpinned by Teaching for Mastery principles (Five Big Ideas). Our children learn concepts in small steps to enable them all to master each topic. Pupils are exposed to a range of different methods, encouraged to evaluate their responses, and identify the most efficient method to enable them to become efficient mathematicians. Oracy opportunities within all maths lessons support our children in deepening their understanding by articulating their thinking. Adaptive teaching approaches, including the use of scaffolds and manipulatives ensure that all children have the opportunity to be successful in the lesson. We use it alongside other materials such as NCETM (where needed) to ensure that ALL children gain a deep and secure understanding of Mathematical concepts alongside a procedural fluency.

In our Maths Lessons we teach for mastery, so we organise our lesson structure to give pupils the best chances of mastering maths. We also organise our classes so that children are in mixed ability groupings, and this is fundamental to our belief that all children can achieve in Maths. Achieving mastery means acquiring a solid enough understanding of the maths that's been taught to enable pupils to move on to more advanced material.



We use a variety of strategies to help support our children in their Maths and one of the most important is the use of concrete resources. Much of the Maths curriculum is based on abstract concepts and we therefore use carefully selected manipulatives to draw out the correct mathematical structures in our lessons. We use place value counters, ten frames, Numicon, number lines and dienes to enhance and scaffold our Maths teaching.

Fluency is integral to the success of children in Maths - it is an essential tool in improving children's confidence when embarking on new mathematical concepts. By committing number facts and knowledge to memory, we can reduce the cognitive demands on children and allow them to solely focus on the new learning taking place in each lesson.

In EYFS, Y1 and during autumn term of Y2, children develop number sense through the Mastering Number programme. 'Fluent in Five', designed to help children develop and maintain fluency in the four operations, is introduced from spring term of Y2 for all children. Online maths programmes, Numbots, TT Rockstars and Learning by Questions further enhance our curricular offer. Our pupils leave Fairfield equipped to reason and problem solve and are ready for real life mathematical problems.

Maths Implementation						
EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Mastering Number (NCETM)	Mastering Number (NCETM) 					
Children explore number and numerical patterns through working in a variety of contexts and with different numbers. (Early Statutory Framework)	Maths No Problem 					
		Fluent in Five 				
Numbots 		TT Rockstars 				
					Learning by Questions 	

Impact:

For our pupils to:

- Regularly master mathematical concepts
- Be confident in reasoning using mathematical language
- Have a love for solving problems within a real-life context
- Achieve at least Age-Related Expectations

Our Maths offer – beyond the curriculum...

			
Engagement with local businesses linking with our annual careers fair. We look at how maths is used in our future careers.	Participation in NSPCC Rocks in our Times Table Rock Stars competitions.	We offer Maths Extra-Curricular Opportunities.	Pupil Maths Champions.

Statutory Framework for EYFS

Number

- Have a deep understanding of numbers to 10, including the compositions of each number.
- Subitise up to 5.
- Automatically recall number bonds to 5 and some number bonds to 10, including double facts.

Numerical Patterns

- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

National Curriculum Coverage - Autumn					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Context: Number and Place Value NC: count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. NC: count, read and write numbers to 100 in numerals NC: given a number, identify one more and one less NC: 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 NC: read and write numbers from 1 to 20 in numerals and words	Context: Number and Place Value / Addition and Subtraction NC: solve problems with addition and subtraction: NC: using concrete objects and pictorial representations, including those involving numbers, quantities and measures NC: applying their increasing knowledge of mental and written methods NC: recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 NC: add and subtract numbers using concrete objects, pictorial representations, and mentally, including: NC: a two-digit number and ones NC: a two-digit number and tens NC: two two-digit numbers NC: adding three one-digit numbers NC: show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot NC: recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Context: Number (Place Value) NC: count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number NC: recognise the place value of each digit in a three-digit number (hundreds, tens, ones) NC: compare and order numbers up to 1000 NC: identify, represent and estimate numbers using different representations NC: read and write numbers up to 1000 in numerals and in words NC: solve number problems and practical problems involving these ideas	Context: Number (Place Value / Addition and Subtraction) NC: count in multiples of 6, 7, 9, 25 and 1000 NC: find 1000 more or less than a given number NC: count backwards through zero to include negative numbers NC: recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) NC: order and compare numbers beyond 1000 NC: identify, represent and estimate numbers using different representations NC: round any number to the nearest 10, 100 or 1000 NC: solve number and practical problems that involve all of the above and with increasingly large positive numbers NC: add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate NC: estimate and use inverse operations to check answers to a calculation NC: solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Context: Number (Place Value / Addition and Subtraction) NC: read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit NC: count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 NC: interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero NC: round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 NC: solve number problems and practical problems that involve all of the above NC: add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) NC: add and subtract numbers mentally with increasingly large numbers NC: use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy NC: solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Context: Number (Place Value/ Addition, Subtraction, Multiplication, Division) NC: read, write, order and compare numbers up to 10 000 000 and determine the value of each digit NC: round any whole number to a required degree of accuracy NC: use negative numbers in context, and calculate intervals across zero NC: solve number and practical problems that involve all of the above. NC: multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication NC: divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context NC: divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context NC: perform mental calculations, including with mixed operations and large numbers

					NC: use their knowledge of the order of operations to carry out calculations involving the four operations NC: solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why NC: solve problems involving addition, subtraction, multiplication and division NC: use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
<u>Context: Number- Addition and Subtraction</u> NC: read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs NC: represent and use number bonds and related subtraction facts within 20 NC: add and subtract one-digit and two-digit numbers to 20, including zero NC: solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.	<u>Context: Number – Multiplication and Division / Measurement</u> NC: recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers NC: calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ($\times$), division ($\div$) and equals (=) signs NC: show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot NC: solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	<u>Context Number (Addition and Subtraction)</u> NC: add and subtract numbers mentally, including: NC: a three-digit number and ones NC: a three-digit number and tens NC: a three-digit number and hundreds NC: add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction NC: estimate the answer to a calculation and use inverse operations to check answers NC: solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. <u>Number (Multiplication and Division)</u>	<u>Context Number (Multiplication and Division)</u> NC: recall multiplication and division facts for multiplication tables up to 12×12 NC: 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 NC: recognise and use factor pairs and commutativity in mental calculations NC: multiply two-digit and three-digit numbers by a one-digit number using formal written layout NC: 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	<u>Context: Number - Multiplication and Division / Statistics</u> NC: identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers NC: know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers NC: establish whether a number up to 100 is prime and recall prime numbers up to 19 NC: 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 NC: multiply and divide numbers mentally drawing upon known facts NC: divide numbers up to 4 digits by a one-digit number using the formal written	<u>Context Number (Factors, Multiples, Prime Numbers, Fractions)</u> NC: identify common factors, common multiples and prime numbers NC: use common factors to simplify fractions; use common multiples to express fractions in the same denomination NC: compare and order fractions, including fractions > 1 NC: add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions NC: multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] NC: divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]

	NC: find different combinations of coins that equal the same amounts of money	NC: recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables NC: 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 NC: 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 objects.		method of short division and interpret remainders appropriately for the context NC: multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) NC: solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes NC: solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign NC: solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. NC: solve comparison, sum and difference problems using information presented in a line graph NC: complete, read and interpret information in tables, including timetables	Context: Number (Fractions, Decimals, Percentages) NC: associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] NC: 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 Mathematics – key stages 1 and 2 41 Statutory requirements NC: multiply one-digit numbers with up to two decimal places by whole numbers NC: use written division methods in cases where the answer has up to two decimal places NC: solve problems which require answers to be rounded to specified degrees of accuracy NC: recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
National Curriculum Coverage - Spring					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Context: Number- Addition and Subtraction NC: read, write and interpret mathematical statements involving addition (+),	Context: Number- Fractions / Measurement (Money) NC: recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	Context: Measurement (time, money, length, mass, volume,) NC: measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Context: Number (Fractions) / Statistics NC: recognise and show, using diagrams, families of common equivalent fractions NC: count up and down in hundredths; recognise that	Context: Number (Fractions, Decimals, Percentages) NC: compare and order fractions whose denominators are all multiples of the same number NC: identify, name and write equivalent fractions of a	Context: Fraction Decimal % / Ratio and Proportion NC: solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

subtraction (–) and equals (=) signs NC: represent and use number bonds and related subtraction facts within 20 NC: add and subtract one-digit and two-digit numbers to 20, including zero NC: solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.	NC: write simple fractions for example, $\frac{1}{2}$, of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. NC: recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value NC: find different combinations of coins that equal the same amounts of money		hundredths arise when dividing an object by one hundred and dividing tenths by ten. NC: 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 NC: add and subtract fractions with the same denominator NC: interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. NC: solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	given fraction, represented visually, including tenths and hundredths NC: recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] NC: add and subtract fractions with the same denominator and denominators that are multiples of the same number NC: multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams NC: read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] NC: recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents NC: round decimals with two decimal places to the nearest whole number and to one decimal place NC: read, write, order and compare numbers with up to three decimal places NC: solve problems involving number up to three decimal places NC: recognise the per cent 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	NC: solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison NC: solve problems involving similar shapes where the scale factor is known or can be found NC: solve problems involving unequal sharing and grouping using knowledge of fractions and multiples
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				NC: 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.	
<u>Context: Geometry- Properties of shapes / Measurement</u> NC: recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. NC: compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] NC: measure and begin to record the following: lengths and heights	<u>Context: Measurement (Time) / Geometry (Shapes)</u> NC: compare and sequence intervals of time NC: 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 NC: know the number of minutes in an hour and the number of hours in a day NC: identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line NC: identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces NC: identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] NC: compare and sort common 2-D and 3-D shapes and everyday objects.	<u>Context: Measurement (time, money, length, mass, volume,)</u> NC: add and subtract amounts of money to give change, using both £ and p in practical contexts NC: tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks NC: 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 NC: know the number of seconds in a minute and the number of days in each month, year and leap year NC: compare durations of events [for example to calculate the time taken by particular events or tasks].	<u>Context: Number (Decimals) / Measurement (Time)</u> NC: recognise and write decimal equivalents of any number of tenths or hundredths NC: recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ NC: 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 NC: round decimals with one decimal place to the nearest whole number NC: compare numbers with the same number of decimal places up to two decimal places NC: solve simple measure and money problems involving fractions and decimals to two decimal places. NC: Convert between different units of measure [for example hour to minute] NC: read, write and convert time between analogue and digital 12- and 24-hour clocks NC: solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	<u>Geometry (Properties of Shapes)</u> NC: identify 3-D shapes, including cubes and other cuboids, from 2-D representations NC: know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles NC: draw given angles, and measure them in degrees (o) NC: identify: angles at a point and one whole turn (total 360o), angles at a point on a straight line and 2 1 a turn (total 180o) , other multiples of 90o NC: use the properties of rectangles to deduce related facts and find missing lengths and angles NC: distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	<u>Context: Measurement / Algebra/ Geometry (Position and Direction, Properties of Shapes)/Area and Perimeter</u> NC: solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate NC: 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 up to three decimal places NC: convert between miles and kilometres NC: recognise that shapes with the same areas can have different perimeters and vice versa NC: recognise when it is possible to use formulae for area and volume of shapes NC: calculate the area of parallelograms and triangles NC: 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].

					NC: use simple formulae NC: generate and describe linear number sequences NC: express missing number problems algebraically NC: find pairs of numbers that satisfy an equation with two unknowns NC: enumerate possibilities of combinations of two variables. NC: draw 2-D shapes using given dimensions and angles NC: recognise, describe and build simple 3-D shapes, including making nets NC: compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons NC: illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius NC: recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
National Curriculum Coverage - Summer					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<u>Context: Number (Multiplication and Division) / Fractions</u> NC: solve one-step problems involving multiplication and division, by calculating the answer using concrete objects,	<u>Context: Measurement (volume, mass, length, capacity)</u> NC: choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g);	<u>Context: Statistics</u> NC: interpret and present data using bar charts, pictograms and tables NC: solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using	<u>Context: Measurement (Money, Mass, Volume, Length) / Number (Roman Numerals)</u> Convert between different units of measure [for example, kilometre to metre]	<u>Context: Measurement (Volume, Area, Perimeter)</u> NC: estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]	<u>Context: Geometry (Position and Direction/Statistics: Graphs and averages/negative numbers)</u> NC: describe positions on the full coordinate grid (all four quadrants)

pictorial representations and arrays with the support of the teacher NC: recognise, find and name a half as one of two equal parts of an object, shape or quantity NC: recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.	capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels NC: compare and order lengths, mass, volume/capacity and record the results using >, < and =	information presented in scaled bar charts and pictograms and tables.	NC: measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres NC: estimate, compare and calculate different measures, including money in pounds and pence NC: 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.	NC: measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres NC: calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes NC: estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water] NC: use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	NC: draw and translate simple shapes on the coordinate plane, and reflect them in the axes NC: use negative numbers in context, and calculate intervals across zero NC: interpret and construct pie charts and line graphs and use these to solve problems NC: calculate and interpret the mean as an average <u>Recapping of Prior Knowledge</u>
<u>Context: Measurement</u> NC: compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than], capacity and volume [for example, full/empty, more than, less than, half, half full, quarter], time [for example, quicker, slower, earlier, later] NC: measure and begin to record the following: mass/weight, capacity and volume, time (hours, minutes, seconds),	<u>Context: Statistics</u> NC: interpret and construct simple pictograms, tally charts, block diagrams and simple tables NC: ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity NC: ask and answer questions about totalling and comparing categorical data.	<u>Context: Number (Fractions)</u> NC: 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 NC: recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators	<u>Context: Geometry (Properties of Shapes, Position and Direction) / Measurement (Area)</u> NC: compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes NC: identify acute and obtuse angles and compare and order angles up to two right angles by size NC: identify lines of symmetry in 2-D shapes presented in different orientations	<u>Context: Geometry (Position and Direction) / Number (Roman Numerals)</u> NC: Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. NC: read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	<u>Context: Recapping of Prior Knowledge</u>

NC: recognise and know the value of different denominations of coins and notes NC: sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening], recognise and use language relating to dates, including days of the week, weeks, months and years NC: tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.		NC: recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators NC: recognise and show, using diagrams, equivalent fractions with small denominators NC: add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] NC: compare and order unit fractions, and fractions with the same denominators NC: solve problems that involve all of the above. Context: Shape NC: draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them NC: recognise angles as a property of shape or a description of a turn NC: 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 NC: identify horizontal and vertical lines and pairs of perpendicular and parallel lines. NC: measure the perimeter of simple 2-D shapes	NC: complete a simple symmetric figure with respect to a specific line of symmetry. NC: describe positions on a 2-D grid as coordinates in the first quadrant NC: describe movements between positions as translations of a given unit to the left/right and up/down NC: plot specified points and draw sides to complete a given polygon. NC: find the area of rectilinear shapes by counting squares		
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