Chaddesley Corbett MATHS Progression document

EYFS:

Birth to Three
• Combine objects like stacking blocks and cups. Put objects inside others and take them out again.
• Take part in finger rhymes with numbers. • React to changes of amount in a group of up to three items.
• Compare amounts, saying 'lots', 'more' or 'same'. • Develop counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.
• Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.'
• Climb and squeeze themselves into different types of spaces. • Build with a range of resources. • Complete inset puzzles.
• Compare sizes, weights etc. using gesture and language - 'bigger/little/smaller', 'high/low', 'tall', 'heavy'.
• Notice patterns and arrange things in patterns.
Three and Four Year Olds
• Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Recite numbers past 5. • Say one number for each item in order: 1,2,3,4,5. • Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). • Show 'finger numbers' up to 5. • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
• Experiment with their own symbols and marks as well as numerals. • Solve real world mathematical problems with numbers up to 5. • Compare quantities using language: 'more than', 'fewer than'.
• Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.
• Understand position through words alone – for example, "The bag is under the table," – with no pointing.
• Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'.
• Make comparisons between objects relating to size, length, weight and capacity.
• Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. • Combine shapes to make new ones – an arch, a bigger triangle etc.
• Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. • Extend and create ABAB patterns – stick, leaf, stick, leaf. • Notice and correct an error in a repeating pattern. • Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'

Reception:	
• Count objects, actions and sounds.	Mastering Number
• Subitise.	Mastering Number
• Link the number symbol (numeral) with its cardinal number value.	Mastering Number
• Count beyond ten.	Mastering Number
• Compare numbers.	Mastering Number
• Understand the 'one more than/one less than' relationship between consecutive numbers.	Mastering Number
• Explore the composition of numbers to 10.	Mastering Number
• Automatically recall number bonds for numbers 0-5 and some to 10.	Mastering Number
• Select, rotate and manipulate shapes to develop spatial reasoning skills.	Mastering Number
• Compose and decompose shapes so that children recognise a shape can have other shapes *within it*, just as numbers can.	White Rose
• Continue, copy and create repeating patterns.	White Rose
• Compare length, weight and capacity.	White Rose

Mastering Number: Overview of content – Reception

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
1 **Children will:**	• perceptually subitise within 3 • identify sub-groups in larger arrangements • create their own patterns for numbers within 4 • practise using their fingers to represent quantities which they can subitise • experience subitising in a range of contexts, including temporal patterns made by sounds.	• relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set • have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song • have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting • have opportunities to develop an understanding that anything can be counted, including actions and sounds • explore a range of strategies which support accurate counting.	• see that all numbers can be made of 1s • compose their own collections within 4.	• understand that sets can be compared according to a range of attributes, including by their numerosity • use the language of comparison, including 'more than' and 'fewer than' • compare sets 'just by looking'.
2 **Children will:**	• continue from first half-term • subitise within 5, perceptually and conceptually, depending on the arrangements.	• continue to develop their counting skills • explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand • begin to count beyond 5 • begin to recognise numerals, relating these to quantities they can subitise and count.	• explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot • explore the composition of numbers within 5.	• compare sets using a variety of strategies, including 'just by looking', by subitising and by matching • compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.
3 **Children will:**	• increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements	• continue to develop verbal counting to 20 and beyond • continue to develop object counting skills, using a range of strategies to develop accuracy	• continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5	• continue to compare sets using the language of comparison, and play games which involve comparing sets

	• explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part • experience patterns which show a small group and '1 more' • continue to match arrangements to finger patterns.	• continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 • order numbers, linking cardinal and ordinal representations of number.	• explore the composition of 6, linking this to familiar patterns, including symmetrical patterns • begin to see that numbers within 10 can be composed of '5 and a bit'.	• continue to compare sets by matching, identifying when sets are equal • explore ways of making unequal sets equal.
4 **Children will:**	• explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'.	• continue to consolidate their understanding of cardinality, working with larger numbers within 10 • become more familiar with the counting pattern beyond 20.	• explore the composition of odd and even numbers, looking at the 'shape' of these numbers • begin to link even numbers to doubles • begin to explore the composition of numbers within 10.	• compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.

5 **Children will:**	• continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns • use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number • subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 • be encouraged to identify when it is appropriate to count and when groups can be subitised.	• continue to develop verbal counting to 20 and beyond, including counting from different starting numbers • continue to develop confidence and accuracy in both verbal and object counting.	• explore the composition of 10.	• order sets of objects, linking this to their understanding of the ordinal number system.
6	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
COUNTING							
	Count up to 3 or 4 objects by saying a number name for each item. Count actions or objects that cannot be moved. Count objects to 10 and begin to count beyond 10. Count out up to 6 objects from a larger group. Count an irregular arrangement of up to 10 objects. **ELG - Verbally count beyond 20, recognising the pattern of the counting system;**	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals Count in multiples of twos, fives and tens	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	Count from 0 in multiples of 4, 8, 50 and 100; Find 10 or 100 more or less than a given number.	Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number Count backwards through zero to include negative numbers	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	Use negative numbers in context, and calculate intervals across zero
PLACE VALUE							
	Use the language of more and fewer to compare 2 sets of objects. **ELG - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;**	Use the language of: equal to, more than, less than (fewer), most, least.	Recognise the place value of each digit in a two-digit number Compare and order numbers from 0 up to 100; use and = signs	Recognise the place value of each digit in a three-digit number Compare and order numbers up to 1000	Recognise the place value of each digit in a four-digit number Order and compare numbers beyond 1000 Round any number to the nearest 10, 100 or 1000	Read, write, order and compare numbers up to 1 000 000 and determine the value of each digit Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100, 000	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit Round any whole number to a required degree of accuracy
REPRESENTING NUMBER							
	Say the correct numeral to represent 1 to 5, then 1 to 10 objects. Recognise some numerals of personal significance. Recognise numerals 1 to 5. **ELG -Explore and represent patterns within numbers up to 10, including evens and**	Identify and represent numbers using objects and pictorial representations including the number line, & use language of: equal to, more than, less than (fewer), most, least Read and write numbers from 1 to 20 in numerals and words Read, write and interpret mathematical statements involving addition (+),	Identify, represent and estimate numbers using different representations, including the number line Read and write numbers to at least 100 in numerals and in words	Identify, represent and estimate numbers using different representations Read and write numbers up to 1000 in numerals and in words	Identify, represent and estimate numbers using different representations 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	Read Roman numerals to 1000 (M) and recognise years written in Roman numerals Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	

	odds, double facts and how quantities can be distributed equally. ELG - Subitise (recognise quantities without counting) up to 5;	subtraction (–) and equals (=) signs					
NUMBER FACTS (+ & -)							
	Say the number that is one more than a given number	Given a number, identify one more and one less Represent and use number bonds and related subtraction facts within 20	Use place value and number facts to solve problems Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				
MENTAL (+ & -)							
	Find the total number of items in 2 groups by counting all of them. Begin to use the vocabulary involved in adding and subtracting. Record, using marks that they can interpret and explain. **ELG - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.**	Add and subtract one-digit and two-digit numbers to 20, including zero	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: TO+O, TO+T, TO+TO and O+O+O Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	Add and subtract numbers mentally, including: HTO+O, HTO+T and HTO+H		Add and subtract numbers mentally with increasingly large numbers	Perform mental calculations, including with mixed operations and large numbers
WRITTEN (+ & -)							
				Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	Add and subtract whole numbers with more than 4 digits, including using formal written methods	
PROBLEM SOLVING (+ & -)							

	Begin to identify their own mathematical problems based on own interests and fascinations.	Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9.	Solve problems with addition and subtraction, using concrete, pictorial and abstract representations Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	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	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	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
NUMBER FACTS (x/÷)							
			Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Recall multiplication and division facts for multiplication tables up to 12 × 12	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 (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19	Identify common factors, common multiples and prime numbers
MENTAL (x/÷)							
			Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times onedigit numbers, using mental methods	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	Multiply and divide numbers mentally drawing upon known facts Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	Perform mental calculations, including with mixed operations and large numbers
WRITTEN (x/÷)							

				Progress to formal written methods calculations as above	Multiply two-digit and threedigit numbers by a one-digit number using formal written layout	Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for twodigit numbers 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	Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 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 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 context
PROBLEMS (x/÷)							
		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.	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	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.	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	Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	Use their knowledge of the order of operations to carry out calculations involving the four operations Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
RECOGNISING FRACTIONS							
		Recognise, find and name a half as one of two equal parts of an object, shape or quantity	Recognise, find, name and write fractions 1 2 , 1 3 , 1 4 , 2 4 *and* 3 4 of a length, shape, set of objects or quantity	Count up and down in tenths; Recognise that tenths arise from dividing an object into 10	Count up and down in hundredths;	Recognise mixed numbers and improper fractions and convert from one form to the other and write	

		Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.		equal parts and in dividing one-digit numbers or quantities by 10	Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	mathematical statements > 1 as a mixed number	
COMPARING FRACTIONS							
				Compare and order unit fractions, and fractions with the same denominators Recognise and show, using diagrams, equivalent fractions with small denominators	Recognise and show, using diagrams, families of common equivalent fractions	Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	Use common factors to simplify fractions Use common multiples to express fractions in the same denomination Compare and order fractions, including fractions > 1
FINDING FRACTIONS OF QUANTITIES							
			Write simple fractions for example, 1/ 2 of 6 = 3 and recognise the equivalence of 2 4 and 1 /2	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	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		
CALCULATING WITH FRACTIONS							
				Add and subtract fractions with the same denominator within one whole [for example, 5 /7 + 1/ 7 = 6 7	Add and subtract fractions with the same denominator	Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Multiply simple pairs of proper fractions, writing the answer in its simplest form Divide proper fractions by whole numbers
DECIMALS AS FRACTIONAL AMOUNTS							

					Recognise and write decimal equivalents of any number of tenths or hundredths Recognise and write decimal equivalents to 1/ 4 , 1 /2 , 3/ 4 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	Read and write decimal numbers as fractions	Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction Identify the value of each digit in numbers given to three decimal places
ORDERING DECIMALS AND CALCULATING WITH DECIMALS							
					Round decimals with one decimal place to the nearest whole number Compare numbers with the same number of decimal places up to two decimal places	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Round decimals with two decimal places to the nearest whole number and to one decimal place Read, write, order and compare numbers with up to three decimal places	Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places Multiply one-digit number with up to two decimal places by whole numbers Use written division methods in cases where the answer has up to two decimal places
PERCENTAGES							
						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	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
FRACTION PROBLEMS							
				Solve problems using all fraction knowledge	Solve simple measure and money problems involving fractions and decimals to two decimal places	Solve problems involving number up to three decimal places Solve problems which require knowing percentage and decimal equivalents of 1 2 , 1 4 , 1 5 , 2 5 , 4 5 and those fractions with a denominator of a multiple of 10 or 25	Solve problems which require answers to be rounded to specified degrees of accuracy Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
RATIO AND PROPORTION							

							Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
ALGEBRA							
							Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables.
MEASURES							
	Order 2 or 3 items by length or height. Order 2 items by weight or capacity	Compare, describe and solve practical problems for: length/height, weight/mass, capacity/volume & time Measure and begin to record length/height, weight/mass, capacity/volume & time	Choose and use appropriate standard units to estimate and measure length/height (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and =	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Convert between different units of measure Estimate, compare and calculate different measures, including money in pounds and pence	Convert between different units of metric measure Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints Estimate volume and capacity	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate 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 Convert between miles and kilometre
PERIMETER AND AREA							

				Measure the perimeter of simple 2-D shapes	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares	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, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes	Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms and triangles 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.
MONEY							
		Recognise and know the value of different denominations of coins and notes	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	Add and subtract amounts of money to give change, using both £ and p in practical contexts		Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling	
TIME							
	Order and sequence familiar events. Measure short periods of time in simple ways	Sequence events in chronological order using language Recognise and use language relating to dates, including days of the week, weeks, months and years Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	Compare and sequence intervals of time 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 Know the number of minutes in an hour and the number of hours in a day	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks 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 Know the number of seconds in a minute and the number of days in each month, year and	Convert between different units of measure (e.g. Hours to minutes) Read, write and convert time between analogue and digital 12- and 24-hour clocks Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Solve problems involving converting between units of time	

				leap year compare durations of events			
2D SHAPE							
	Begin to use mathematical names for solid 3D shapes and flat 2D shapes, and mathematical terms to describe shapes.	Recognise and name common 2-D shapes (e.g. Square, circle, triangle)	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. (vertices, sides) Compare and sort common 2-D shapes	Draw 2-D shapes Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes 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.	Use the properties of rectangles to deduce related facts and find missing lengths and angles Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	Draw 2-D shapes using given dimensions and angles Compare and classify geometric shapes based on their properties and sizes Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
3D SHAPE							
	Use familiar objects and common shapes to create and recreate patterns.	Recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids & spheres	Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces Identify 2-D shapes on the surface of 3-D shapes. Compare and sort common 3-D shapes and everyday objects	Make 3-D shapes using modelling materials Recognise 3-D shapes in different orientations and describe them		Identify 3-D shapes, including cubes and other cuboids, from 2-D representations	Recognise, describe and build simple 3-D shapes, including making nets • Find unknown angles in any triangles, quadrilaterals, and regular polygons
ANGLES							
				Recognise angles as a property of shape or a description of a turn Identify right angles, recognise that two right angles make a halfturn, three make three quarters of a turn and four a complete turn Identify whether angles are greater or less than right angle	Identify acute and obtuse angles and compare and order angles up to two right angles by size	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles Draw given angles, and measure them in degrees (°) Identify angles at a point and one whole turn (total 360°); at a point on a straight line and ½ a turn (total 180°) Identify other multiples of 90°	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
POSITION AND DIRECTION							

	Describe their relative position such as behind or next to.	Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	Order and arrange combinations of mathematical objects in patterns and sequences. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and ¾ turns		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	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	Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
INTERPRETING DATA							
			Interpret and construct simple pictograms, tally charts, block diagrams and simple tables	Interpret and present data using bar charts, pictograms and tables	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Complete, read and interpret information in tables, including timetables	Interpret and construct pie charts and line graphs calculate and interpret the mean as an average
EXTRACT INFORMATION FROM DATA							
			Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totalling and comparing categorical data	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	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Solve comparison, sum and difference problems using information presented in a line graph	Use pie charts and line graphs to solve problems

EYFS Mathematics ELG: Number

Children at the expected level of development will: -

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns

Children at the expected level of development will:

- 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.