Humber Estuary Federation: Maths Curriculum Knowledge Progression

Area of Maths	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number: Number and Place Value	• 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	• Count objects, actions and sounds. • Subitise • Link the number symbol (numeral) with its cardinal number value. • Count beyond ten. • Compare numbers	• Count forwards to 100, from 0, 1 or any given number • Count backwards from 100, from any given number • Count across 100 • Read numbers to 100 in numerals • Write numbers to 100 in numerals • Count in multiples of 2s • Count in multiples of 5s • Count in multiples of 10s • Find one more than a given number	• Count in steps of 2 from 0 • Count in steps of 3 from 0 • Count in steps of 5 from 0 • Count in tens from any number, forward and backward • Recognise the place value of each digit in a two-digit number (tens, ones) • Identify and represent numbers using different representations, including the number line • Estimate numbers using different representations, including the number line	• Count from 0 in multiples of 4 • Count from 0 in multiples of 8 • Count from 0 in multiples of 50 • Count from 0 in multiples of 100 • Find 10 more or less than a given number • Find 100 more or less than a given number • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • Compare and order numbers up to 1000 • Identify and represent numbers using different representations	• Count in multiples of 6 • Count in multiples of 7 • Count in multiples of 9 • Count in multiples of 25 • Count in multiples of 1000 • Find 1000 more than a given number • Find 1000 less than a given number • Count backwards through zero to include negative numbers • Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • Order and compare	• Read and write numbers to at least 1 000 000 and determine the value of each digit • Order and compare numbers to at least 1 000 000 and determine the value of each digit • Count forwards in steps of powers of 10 for any given number up to 1 000 000 • Count backwards in steps of powers of 10 for any given number up to 1 000 000 • Interpret negative numbers in context • Count forwards with positive and negative whole numbers, including through zero	• Read and write numbers up to 10 000 000 and determine the value of each digit • 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 • Use negative numbers in context, and calculate intervals across zero • Solve number and practical problems that involve all of the above.

	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		● Find one less than a given number ● Identify & represent numbers using objects and pictorial representations ● Use language of equal to, more than, less than, most, least ● Read numbers from 1-20 in words ● Write numbers from 1-20 in words	● Compare and order numbers from 0 up to 100 ● Use <, > and = signs ● Read and write numbers to at least 100 in numerals ● Read and write numbers to at least 100 in words ● Use place value and number facts to solve problems.	● Estimate numbers using different representations ● Read and write numbers up to 1000 in numerals and in words ● Solve number problems and practical problems involving these ideas.	numbers beyond 1000 ● Identify and represent numbers using different representations ● Estimate numbers using different representations ● Round any number to the nearest 10 ● Round any number to the nearest 100 ● Round any number to the nearest 1000 ● Solve number and practical problems that involve all of the above and with increasingly large positive numbers ● Read Roman numerals to 100 (I to C) ● Know that over time, the numeral system changed to include the	● Count backwards with positive and negative whole numbers, including through zero ● Round any number up to 1 000 000 to the nearest 10, ● Round any number up to 1 000 000 to the nearest 100 ● Round any number up to 1 000 000 to the nearest 1000 ● Round any number up to 1 000 000 to the nearest 10 000 ● Round any number up to 1 000 000 to the nearest 100 000 ● Solve number problems and practical problems that involve all of the above ● Read Roman numerals to 1000 (M)	

	the numeral, up to 5. ●					concept of zero and place value.	● Recognise years written in Roman numerals	
Pattern	● Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. ● Use informal language like 'pointy', 'spotty', 'blobs', etc. ● Extend and	● Continue, copy and create repeating patterns.	●	●	●	●	●	●

	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...'							
Number: Addition and	● Experiment with their own	● Subitise. ● Understand the 'one more	● Read, write and interpret mathematical statements	● solve problems with addition using concrete	● Add and subtract mentally a three-digit	● Add numbers with up to 4 digits using the formal	● Add whole numbers with more than 4 digits,	**Addition, Subtraction, Multiplication and Division**

Subtraction	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'.	than/one less than' relationship between consecutive numbers. ● Explore the composition of numbers to 10. ● Automatically recall number bonds for numbers 0–5 ● and some to 10. ●	involving + and = ● Read, write and interpret mathematical statements involving - and = ● Represent and use number bonds and related subtraction facts within 20 ● Add one-digit and two-digit numbers to 20, including zero ● solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations ● Solve missing number problems such as 7 = ? – 9	objects including those involving numbers, quantities and measures ● Solve problems with addition using pictorial representation, including those involving numbers, quantities and measures ● Apply their increasing knowledge of mental methods ● Apply their increasing knowledge of written methods ● Recall and use addition and subtraction facts to 20 fluently ● Derive and use related facts up to 100 ● Add a two-digit number and ones using concrete objects, pictorial	number and ones ● Add and subtract mentally a three-digit number and tens ● Add and subtract mentally a three-digit number and hundreds ● Add numbers with up to three digits, using formal written methods of columnar addition ● Subtract numbers with up to three digits, using formal written methods of columnar subtraction ● Estimate the answer to a calculation and use inverse operations to check answers ● Solve problems, including missing	written methods of columnar addition where appropriate ● Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate ● Estimate and use inverse operations to check answers to a calculation ● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	including using formal written methods (columnar addition) ● Subtract whole numbers with more than 4 digits, including using formal ● written methods (columnar subtraction) ● Add numbers mentally with increasingly large numbers ● Subtract numbers mentally with increasingly large numbers ● 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	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 the context Perform mental calculations, including with mixed operations and large numbers Identify common factors

				representations and mentally ● Add a two-digit number and tens using concrete objects, pictorial representations and mentally ● Add two two-digit numbers using concrete objects, pictorial representations and mentally ● Add three one-digit numbers using concrete objects, pictorial representations and mentally ● Subtract a two-digit number and ones using concrete objects, pictorial representations and mentally ● Subtract a two-digit number and tens using concrete objects, pictorial	number problems, using number facts, place value, and more complex addition and subtraction.		operations and methods to use and why.	Identify common multiples Identify prime numbers 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 Solve problems involving subtraction Solve problems involving multiplication Solve problems involving division Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

				representations and mentally ● Subtract two two-digit numbers using concrete objects, pictorial representations and mentally ● Subtract three one-digit numbers using concrete objects, pictorial representations and mentally ● Show that addition of two numbers can be done in any order (commutative) ● Show that subtraction of one number from another cannot be done in any order ● Recognise and use the inverse relationship between addition and subtraction				

				• Use their knowledge of inverse operations to check calculations and solve missing number problems.				
Number: Multiplication & Division			• Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. • Solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	• Recall and use multiplication and division facts for the 2 times tables • Recall and use multiplication and division facts for the 5 times tables • Recall and use multiplication and division facts for the 10 times tables • Recognise odd and even numbers • Calculate mathematical statements for multiplication within the multiplication	• Recall and use multiplication and division facts for the 3x tables • Recall and use multiplication and division facts 4x tables • Recall and use multiplication and division facts for the 8x tables • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit	• Recall multiplication and division facts for multiplication tables up to 12 × 12 • Use place value, known and derived facts to multiply mentally, including multiplying by 0 and 1 • Use place value, known and derived facts to divide mentally, including dividing by 1 • Use place value, known and derived facts to multiply and	• Identify multiples • Identify 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 (nonprime) numbers • Establish whether a number up to 100 is prime • Recall prime numbers up to 19 • Multiply numbers up to 4 digits by a one- or two-digit number using a formal written	

				tables ● Calculate mathematical statements for division within the times tables ● Write mathematical multiplication statements using the multiplication (×) and equals (=) signs ● Write mathematical division statements using the division (÷) and equals (=) signs ● Show that multiplication of two numbers can be done in any order (commutative) ● Show that division of one number by another cannot be done in any order	numbers times one-digit ● numbers, using mental and progressing to formal written methods ● Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems ● Solve problems, including missing number problems, involving multiplication and division, including correspondence problems in which n objects are connected to m objects.	divide mentally, including multiplying together three numbers ● Recognise and use factor pairs and commutativity in mental calculations ● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout ● Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit ● Solve problems involving multiplying and adding, including integer scaling problems	method, including long multiplication for two-digit numbers ● Multiply numbers mentally, drawing upon known facts ● Divide numbers mentally, drawing upon known facts ● 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 whole numbers and those involving decimals by 10, 100 and 1000 ● Divide whole numbers and those involving decimals by 10, 100 and 1000. ● Recognise and use square numbers and the notation for squared (2)	

				• Solve problems involving multiplication using materials, arrays, repeated addition, mental methods, and multiplication facts, including problems in contexts • Solve problems involving division using materials, arrays, repeated subtraction, mental methods, and division facts, including problems in contexts		• Solve problems involving multiplying and adding, including harder correspondence problems such as n objects are connected to m objects.	• Recognise and use cube numbers and the notation for cubed (3) • Solve problems involving multiplication including using their knowledge of factors and multiples, squares and cubes • Solve problems involving 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 including scaling by simple	

							fractions and problems involving simple rates. ● Solve problems involving division, including scaling by simple fractions and problems involving simple rates.	
Number: Fractions (inc. decimals and percentages where relevant)			• Recognise, find and name a half as one of two equal parts of an object. • Recognise, find and name a half as one of two equal parts of a shape. • Recognise, find and name a half as one of two equal parts of a quantity. • Recognise, find and name a quarter as one of four equal parts of an object. • Recognise, find and name a quarter as one of four equal parts of a shape • Recognise, find and name a	● Recognise, find, name and write 1/3, ¼., 2/4 and ¾ of a length ● Recognise, find, name and write 1/3, ¼., 2/4 and ¾ of a shape ● Recognise, find, name and write 1/3, ¼., 2/4 and ¾ of a set of objects ● Recognise, find, name and write 1/3, ¼., 2/4 and ¾ of a quantity ● Write simple fractions for example, ½ of 6 = 3	● 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 ● Recognise, find and write fractions of a discrete set of objects: unit fractions ● Recognise, find and write fractions of a discrete set of objects: non-unit	● Recognise and show, using diagrams, families of common equivalent fractions ● Count up and down in hundredths ● Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ● Solve problems involving increasingly harder fractions to calculate quantities	● 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 ● Recognise mixed numbers and improper fractions and convert from one form to the Other	● Use common factors to simplify fractions ● Use common multiples to express fractions in the same denomination ● Compare and order fractions, including fractions > 1 ● Add fractions with different denominators and mixed numbers, using the concept of equivalent fractions ● Subtract fractions with different denominators and mixed numbers, using the

			quarter as one of four equal parts of a quantity.	● Recognise the equivalence of 2/4 and 1/2 .	fractions with small denominators ● Recognise and use fractions as numbers: unit fractions ● Recognise and use fractions as numbers: non-unit fractions with ● small denominators ● Recognise and show, using diagrams, equivalent fractions with small denominators ● Add and subtract fractions with the same denominator within one whole [for example, 5/7+1/7=6/7 ● Compare and order unit fractions ● Compare and order fractions	● Solve problems involving fractions to divide quantities, including non-unit fractions where the answer is a whole number ● Add fractions with the same denominator ● Subtract fractions with the same denominator ● Recognise and write decimal equivalents of any number of tenths ● Recognise and write decimal equivalents of any number of hundredths ● Recognise and write decimal equivalents to ¼ ● Recognise and write decimal equivalents to ½ ● Recognise and write decimal equivalents to ¾	● Write mathematical statements > 1 as a mixed number [for example, 2/5+4/5=6/5 =1 1/5] ● Add fractions with the same denominator and denominators that are multiples of the same number ● 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 ● Read and write decimal numbers as fractions [for example, 0.71 = 71/100]	concept of equivalent fractions ● Multiply simple pairs of proper fractions, writing the answer in its simplest form ● [for example, 1/4x1/2=1/8] ● Divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6] ● Associate a fraction with division and calculate decimal fraction equivalents [for ● example, 0.375] for a simple fraction [for example, 3/8] ● Identify the value of each digit in numbers given to three decimal places and multiply numbers by 10, 100 and 1000 giving answers up to three decimal places ● Identify the value of each digit in numbers given to

					with the same denominators ● Solve problems that involve all of the above	● Find the effect of dividing a one- or two-digit number by 10 identifying the value of the digits in the answer as ones, tenths and hundredths ● Find the effect of dividing a one- or two-digit number by 100, identifying the value of the digits in the answer as ones, tenths and hundredths ● 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 ● Solve simple measure problems involving	● Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ● Round decimals with two decimal places to the nearest whole number ● Round decimals with two decimal places to one decimal place ● Read, write, order and compare numbers with up to three decimal places ● Solve problems involving number up to three decimal places ● Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred' ● Write percentages as a fraction with	three decimal places 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 ● 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.

						fractions and decimals to two decimal places. ● Solve simple money problems involving fractions and decimals to two decimal places.	denominator 100, and as a decimal ● Solve problems which require knowing percentage and decimal equivalents of 1/2, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.	
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 the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

								• 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.
Measurement	Make comparisons between objects relating	Compare length, weight and capacity	• Compare, describe and solve practical problems for lengths and heights [for	• Choose and use appropriate standard units to estimate and	• Measure, compare, add and subtract	• Convert between different units of measure [for example,	• Convert between different units of metric measure (for example,	• Solve problems involving the calculation and conversion of units

	to size: length, weight and capacity.		example, long/short, longer/shorter, tall/short, double/half] • Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than] • Compare, describe and solve practical problems for capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] • Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later] • Measure and begin to record lengths and heights ● Measure and begin to	measure length/height in ● any direction (m/cm) to the nearest appropriate unit, using rulers and other measuring vessels ● Choose and use appropriate standard units to estimate and measure mass (kg/g) to the ● nearest appropriate unit, using scales and other measuring vessels ● Choose and use appropriate standard units to estimate and measure temperature (°C) to the ● nearest appropriate unit, using thermometers ● Choose and use appropriate standard units to	lengths (m/cm/mm) ● Measure, compare, add and subtract mass (kg/g) ● Measure, compare, add and subtract ● volume/capacity (l/ml) ● Measure the perimeter of simple 2-D shapes ● Add and subtract amounts of money to give change, using both £ and p in practical contexts ● Tell and write the time from an analogue clock, including using Roman numerals from I to XII, contexts ● Tell and write the time from an analogue clock, including a	kilometre to metre; hour to minute] ● Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ● Find the area of rectilinear shapes by counting squares ● Estimate, compare and calculate different measures, including money in pounds and pence	kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) ● Understand and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints ● 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)	of measure, using decimal notation up to three decimal places where appropriate ● Use, read, write and convert between standard units, converting measurements of length from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ● Use, read, write and convert between standard units, converting measurements of mass from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ● Use, read, write and convert between standard units, converting measurements of volume from a

			record mass/weight ● Measure and begin to record capacity and volume ● Measure and begin to record time (hours, minutes, seconds) ● Recognise and know the value of different denominations of coins and notes ● Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	estimate and measure capacity (litres/ml) to the nearest appropriate unit, using scales and other and measuring vessels ● Compare and order lengths and record the results using >, < and = ● Compare and order mass and record the results using >, < and = ● Compare and order volume/ capacity and record the results using >, < and = ● Recognise and use symbols for pounds (£) and pence (p) ● Combine amounts of money to make ● a particular value	12-hour and 24-hour clock ● Estimate and read time with increasing accuracy to the nearest minute ● Know the number of seconds in a 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 days in each month, year and leap year ● Compare durations of events [for example to calculate the		● Estimate the area of irregular shapes ● Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] ● Estimate capacity [for example, using water] ● Solve problems involving converting between units of time ● Use all four operations to solve problems involving measure [for example, length, ● mass, volume, money] using decimal notation, including scaling.	smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ● Use, read, write and convert between standard units, converting measurements of 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 kilometres ● 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 ● Calculate the area of triangles

			• Recognise and use language relating to dates, including days of the week, weeks, months and years • Tell the time to the hour draw the hands on a clock face to show these times. • Tell the time to the half past the hour and draw the hands on a clock face to show these times.	• 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 • Compare and sequence intervals of time • Tell and write the time to quarter past/to the hour and draw the hands on a clock face to show these times • Tell and write the time to five minutes and draw the • hands on a clock face to show these times	time taken by particular events or tasks].			• 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].

				• Know the number of minutes in an hour • Know the number of hours in a day.				
Geometry: Properties of Shapes	• Talk about and explore 2D shapes (e.g. circles, rectangles and triangles) • Talk about and explore 3D shapes (for example, cuboids) • Use informal and mathem	• Select, rotate and manipulate shapes to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.	• Recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] • Recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	• Identify and describe the properties of 2-D shapes, including the number of sides • Identify and describe line symmetry in a vertical line • 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, [for example, a circle on a cylinder and a triangle on a pyramid]	• Draw 2-D shapes • Make 3-D shapes using modelling materials • Recognise 3-D shapes in different orientations and describe them • Recognise angles as a property of shape • Recognise angles as a description of a turn • Identify right angles • Recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn	• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Identify acute and obtuse angles • Compare and order angles up to two right angles by size • Identify lines of symmetry in 2-D shapes presented in different orientations • Complete a simple symmetric figure with respect to a specific line of symmetry.	• Identify 3-D shapes, including cubes and other cuboids, from 2-D representations • 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°) • Identify angles at a point on a straight line and ½ a turn (total 180°) • Identify other multiples of 90°	• Draw 2-D shapes using given dimensions and angles • Recognise, describe and build simple 3-D shapes, including making nets • Compare and classify geometric shapes based on their properties and sizes • Find unknown angles in any triangles, quadrilaterals, and regular polygons • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

	atical languag e: ● ‘sides’, ‘corners’ ; ‘straight ’, ‘flat’, ‘round ● Select shapes appropri ately: flat surfaces for building, a triangul ar prism for a roof, etc. ● Combin e shapes to make new ones – an arch, a bigger triangle, etc.			● Compare and sort common 2-D and 3-D shapes and everyday objects.	● Identify whether angles are greater than or less than a right angle ● Identify horizontal and vertical lines ● Identify pairs of perpendicular and parallel lines.		● 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.	● Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

Geometry: Position and Direction	• 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'.	•	• Describe position and direction, inc. whole, half, quarter and three quarter turns. • Describe 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 • Use mathematical vocabulary to describe position, direction and movement, distinguishing between rotation as a turn • Use mathematical vocabulary to describe position,		• 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, using the appropriate language, and know that the shape has not changed. • Identify, describe and represent the position of a shape following a 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 • Draw and reflect simple shapes in the axes

				direction and movement, in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).				
Statistics				• Interpret and construct simple pictograms • Interpret and construct simple tally charts • Interpret and construct simple block diagrams • Interpret and construct simple simple tables • 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	• Interpret and present data using bar charts • Interpret and present data using pictograms • Interpret and present data using tables • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts • Solve one-step and two-step questions using information	• Interpret discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar	• Solve comparison, sum and difference problems using information presented in a line graph • Complete, read and interpret information in tables, including timetables.	• Interpret and construct pie charts and use these to solve problems • Interpret and construct line graphs and use these to solve problems • Calculate and interpret the mean as an average.

				totalling and comparing categorical data.	presented in pictograms ● Solve one-step and two-step questions using information presented in tables.	charts, pictograms, tables and other graphs.		