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Number – Number and Place Value		Vocabulary
EYFS – Number and Place Value	- Children count reliably with numbers from 1-20 - Place these numbers in order and say which number is one more or one less than a given number. - Using quantities and objects, they add and subtract two single digit numbers and count on or back to - find the answer. - Solve problems, including doubling, halving and sharing	
Year 1 – Number and Place Value	- count to and across 100, forwards and backwards, beginning with zero or one, or from any given number - count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens - given a number, identify one more and one less - 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, leas - read and write numbers from one to 20 in numerals and words	number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens equal to

		equivalent to
		is the same as
		more, less
		most, least
		many
		odd, even
		multiple of
		few
		pattern
		pair
		ones
		tens
		digit
		the same number as, as many as more, larger, bigger, greater fewer, smaller, less
		fewest, smallest, least
		most, biggest, largest, greatest one more, ten more
		one less, ten less
		equal to
		one more, ten more one less, ten less compare order
		size
		first, second, third... twentieth last, last but one
		before, after
		next
		between
		half-way between

		above, below
		guess how many ...? estimate nearly roughly close to about the same as just over, just under too many, too few enough, not enough
Year 2 – Number and Place Value	• count in steps of two, three, and five from zero, and in tens from any number, forward and backward • recognise the place value of each digit in a 2-digit number (tens, ones) • identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from zero up to 100; use and = signs • read and write numbers to at least 100 in numerals and in words • use place value and number facts to solve problems	two hundred ... one thousand threes, fours and so on tally sequence continue predict rule > greater than < less than hundreds one-, two- or three-digit number place, place value stands for, represents exchange twenty-first, twenty-second ... exact, exactly
Year 3 – Number and Place Value	• count from zero in multiples of four, eight, 50 and 100; find ten or 100 more or less than a given number • recognise the place value of each digit in a 3-digit number (hundreds, tens, ones)	eights, fifties and so on to hundreds factor of relationship

	• compare and order numbers up to 1000 • identify, represent and estimate numbers using different representations • read and write numbers up to 1000 in numerals and in words • solve number problems and practical problems involving these ideas	Roman numerals one hundred more one hundred less round, nearest, round to the nearest ten, hundred round up, round down round, nearest, round to the nearest ten, hundred round up, round down approximate approximately
Year 4 – Number and Place Value	• count in multiples of six, seven, nine, 25 and 1000 • find 1000 more or less than a given number • find 1000 more or less than a given number • recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000 • identify, represent and estimate numbers using different representations • round any number to the nearest ten, 100 or 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) and know that over time, the numeral system changed to include the concept of zero and	ten thousand, hundred thousand, million sixes, sevens, nines, twenty-fives next, consecutive integer, positive, negative above/below zero, minus negative numbers one thousand less, one thousand more thousand

	place value	
Year 5 – Number and Place Value	- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit - count forwards or backwards in steps of powers of ten 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 - round any number up to 1 000 000 to the nearest ten, 100, 1000, 10 000 and 100 000 - solve number problems and practical problems that involve all of the above - read Roman numerals to 1000 (M) and recognise years written in Roman numerals	Factor pair ≥ greater than or equal to ≤ less than or equal to formula divisibility square number prime number ascending/descending order ten thousand
Year 6 – Number and Place Value	- 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 - use negative numbers in context, and calculate intervals across zero - solve number and practical problems that involve all of the above - read Roman numerals to 1000 (M) and recognise years written in Roman numerals	factorise prime factor, digit total

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Number – Addition and Subtraction

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EYFS - Addition and Subtraction	• 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.	

Year 1 – Addition and Subtraction	• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
	
	• represent and use number bonds and related subtraction facts within 20
	
	• add and subtract single-digit and 2-digit numbers to 20, including zero
	
	• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = – 9
		addition
		
		add, more, and make, sum, total altogether double
		
		near double
		    half, halve
		    one more, two more ... ten more how many
		    more to make ...? how many more is ... than ...?
		    how much more is ...?

Year 2 – Addition and Subtraction	• solve problems with addition and subtraction:
	
	• using concrete objects and pictorial representations, including those involving numbers, quantities and measures
	
	• applying their increasing knowledge of mental and written methods
	
	• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
	
	• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
	  ➢ a 2-digit number and ones
	  ➢ a 2-digit number and tens
	  ➢ two 2-digit numbers
	  ➢ adding three single-digit numbers
	
	• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
	
	• recognise and use the inverse relationship between addition and subtraction and
		one
		
		hundred more
		
		one hundred less
		
		facts tens boundary

	use this to check calculations and solve missing number problems	
Year 3 – Addition and Subtraction	• add and subtract numbers mentally, including: ➢ a 3-digit number and ones ➢ a 3-digit number and tens ➢ a 3-digit number and hundreds • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • 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	hundreds boundary
Year 4 – Addition and Subtraction	• add and subtract numbers with up to four digits using the formal written methods of columnar addition and 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	inverse
Year 5 – Addition and Subtraction	• add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction) • add and 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 operations and methods to use and why	ones boundary, tenths boundary
Year 6 – Addition and Subtraction	• perform mental calculations, including with mixed operations and large 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, subtraction, multiplication and division • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	

Number – Multiplication and Division		
EYFS – Multiplication and Division	• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.	
Year 1 – Multiplication and Division	• 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	multiplication multiply multiplied by multiple division dividing grouping sharing doubling halving array number patterns
Year 2 – Multiplication and Division	• recall and use multiplication and division facts for the two, five and ten multiplication tables, including recognising odd and even numbers • 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	groups of times once, twice, three times ... ten times repeated addition divide, divided by, divided into groups, share, share equally left, left over one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of

	• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	row, column multiplication table multiplication fact, division fact
Year 3 – Multiplication and Division	• recall and use multiplication and division facts for the three, four and eight multiplication tables • write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers multiplied by 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 and correspondence problems in which n objects are connected to m objects	factor product remainder
Year 4 – Multiplication and Division	• recall multiplication and division facts for multiplication tables up to 12 × 12 • use place value, known and derived facts to multiply and divide mentally, including: multiplying by zero and one; dividing by one; multiplying together three numbers • recognise and use factor pairs and commutativity in mental calculations • multiply 2-digit and 3-digit numbers by a single digit number using formal written layout • solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by a single-digit number, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	inverse square, squared cube, cubed
Year 5 – Multiplication and Division	• 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	
	• multiply numbers up to four digits by a single- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers	
	• multiply and divide numbers mentally drawing upon known facts	
	• divide numbers up to four digits by a single digit number using the formal written method of short division and interpret remainders appropriately for the context	
	• multiply and divide whole numbers and those involving decimals by ten, 100 and 1000	
	• recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	
	• 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	
Year 6 – Multiplication and Division	• multiply multi-digit numbers up to four digits by a 2-digit whole number using the formal written method of long multiplication	
	• divide numbers up to four digits by a 2-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 four digits by a 2-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, common multiples and 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, subtraction, multiplication and division - use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	

Number - Fractions		
Year 1 - Fractions	- recognise, find and name a half as one of two equal parts of an object, shape or quantity - recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	fraction equal part equal grouping equal sharing parts of a whole half one of two equal parts quarter one of four equal parts
Year 2 - Fractions	- recognise, find, name and write fractions 1/2 , 1/4 , 2/4 and 3/4 of a length, shape, set of objects or quantity - write simple fractions [e.g. 1/2 of 6 = 3] and recognise the equivalence of 2/4 and 1/2	equivalent fraction mixed number numerator, denominator wo halves two quarters, three quarters one third, two thirds one of three equal parts

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Year 3 - Fractions	• count up and down in tenths; recognise that tenths arise from dividing an object into ten equal parts and in dividing single-digit numbers or quantities by ten • 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 • recognise and show, using diagrams, equivalent fractions with small denominators • add and subtract fractions with the same denominator within one whole [e.g. 5/7 + 2/7 = 7/7] • compare and order unit fractions, and fractions with the same denominators • solve problems that involve all of the above	sixths, sevenths, eighths, tenths ...
Year 4 – Fractions (including decimals)	• 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, and fractions to divide quantities, including non-unit fractions where the answer is a whole number • add and subtract fractions with the same denominator • 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 single- or 2-digit number by ten and 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	hundredths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion

	places • solve simple measure and money problems involving fractions and decimals to two decimal places	
Year 5 – Fractions (including decimals and percentages)	• 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 and write mathematical statements > one as a mixed number [e.g. 2/5 + 4/5 = 6/5 =1 1/5] • 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 • read and write decimal numbers as fractions [e.g. 0.71 = 71 100] • 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 • 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', and write percentages as a fraction with denominator 100, and as a decimal	proper/improper fraction, equivalent, reduced to, cancel thousandths in every, for every percentage, per cent, %

	• 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 ten or 25	
Year 6 – Fractions (including decimals and percentages)	• use common factors to simplify fractions; use common multiples to express fractions in the same denomination • compare and order fractions, including fractions > one • 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 [e.g. 1/4 × 1/2 = 3/4] • divide proper fractions by whole numbers [e.g. 1 3 ÷ 2 = 1/6] • associate a fraction with division and calculate decimal fraction equivalents [e.g. 0.375] for a simple fraction [e.g. 3/8] • identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by ten, 100 and 1000 giving answers up to three decimal places • multiply single-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	ratio
	Measurement - Measurement	

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EYFS - Measurement	• Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	
Year 1 - Measurement	• compare, describe and solve practical problems for: ➢ lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half ➢ mass/weight [e.g. heavy/light, heavier than, lighter than] ➢ capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter ➢ time [e.g. quicker, slower, earlier, later] ➢ measure and begin to record the following: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds) • recognise and know the value of different denominations of coins and notes • sequence events in chronological order using language [e.g. 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 • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	measure measurement size compare guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as roughly just over, just under centimetre, metre length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on

		far, near, close ruler metre stick kilogram, half kilogram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales litre, half litre capacity volume full empty more than less than half full quarter full holds container time days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, month, year birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier, later next, first, last midnight date now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest

		takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to clock, clock face, watch, hands hour hand, minute hand hours, minutes money coin penny, pence, pound price, cost buy, sell spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total
Year 2 – Measurement	• choose and use appropriate standard units to estimate and measure length/height in any direction (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 =	Measuring scale two halves two quarters, three quarters one third, two thirds one of three equal parts

	• 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 • 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	gram millimetre contains temperature degree 5, 10, 15 ... minutes past Fortnight Bought sold digital/analogue clock/watch, timer seconds
Year 3 – Measurement	• measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); 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, 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	division approximately millimetre, kilometre, mile distance apart ... between ... to ... from perimeter centigrade century calendar,

	• know the number of seconds in a minute and the number of days in each month, year and leap year • compare durations of events [e.g. to calculate the time taken by particular events or tasks]	earliest, latest a.m., p.m. Roman numerals 12-hour clock time, 24-hour clock time
Year 4 – Measurement	• convert between different units of measure [e.g. 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 • 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	unit, standard unit metric unit breadth edge, area, covers square centimetre (cm^2) mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/ lightest measuring cylinder leap year, millennium noon, date of birth timetable, arrive, depart
Year 5 – Measurement	• convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and	Imperial unit square metre (m^2), square millimetre (mm^2)

	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) and estimate the area of irregular shapes • estimate volume [e.g. using 1 cm³ blocks to build cuboids (including cubes)] and capacity [e.g. using water] • solve problems involving converting between units of time • use all four operations to solve problems involving measure [e.g. length, mass, volume, money] using decimal notation, including scaling	pint, gallon discount currency
Year 6 - Measurement	• 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 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 and triangles • calculate, estimate and compare volume of cubes and cuboids using standard	yard, foot, feet, inch, inches circumference tonne, pound, ounce centilitre cubic centimetres(cm^3), cubic metres (m^3), cubic millimetres (mm^3), cubic kilometres (km^3) Greenwich Mean Time, British Summer Time, International Date Line profit, loss

	units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [e.g. mm3 and km3]	

	Measurement – Properties of Shape	
EYFS – Properties of shape	• Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. • Recognise, create and describe patterns. • Explore characteristics of everyday objects and shapes and use mathematical language to describe them.	
Year 1 – Properties of Shape	• recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [e.g. rectangles (including squares), circles and triangles] • 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres]	hape, pattern flat curved, straight round hollow, solid sort make, build, draw size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern pattern, repeating pattern match corner, side point, pointed rectangle (including square) circle

		triangle
		face, edge, vertex, vertices cube, cuboid pyramid sphere
		cone
		cylinder
Year 2 – Properties of Shape	• identify and describe the properties of 2-D shapes, including the number of sides and 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, [e.g. a circle on a cylinder and a triangle on a pyramid] • compare and sort common 2-D and 3-D shapes and everyday objects	surface line of symmetry rectangular circular triangular pentagon hexagon octagon
Year 3 – Properties of Shape	• draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them • recognise angles as a property of shape or 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; identify whether angles are greater than or less than a right angle • identify horizontal and vertical lines and pairs of perpendicular and parallel lines	perimeter pentagonal hexagonal octagonal quadrilateral right-angled parallel, perpendicular hemisphere prism, triangular prism angle … is a greater/smaller angle than

		acute angle
		obtuse angle
Year 4 – Properties of Shape	• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify acute and obtuse angles and 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	line construct, sketch centre reflect, reflection angle, right-angled base, square-based regular, irregular 2-D, two-dimensional oblong rectilinear equilateral triangle, isosceles triangle, scalene triangle heptagon parallelogram, rhombus, trapezium polygon 3-D, three-dimensional spherical cylindrical, tetrahedron, polyhedron
Year 5 – Properties of Shape	• identify 3-D shapes, including cubes and other cuboids, from 2-D representations	radius, diameter

	- 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°) - angles at a point on a straight line and 1 2 a turn (total 180° - other multiples of 90° - 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	congruent axis of symmetry, reflective symmetry x-axis, y-axis, quadrant octahedron
Year 6 – Geometry/Properties of Shape	- 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 and 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 - recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	circumference, concentric, arc net, open, closed intersecting, intersection plane kite dodecahedron net, open, closed reflex angle

Measurement – Position and Direction		
EYFS – Position and direction	• Use everyday language to talk about size, weight, capacity, position, distance, time	

	and money to compare quantities and objects and to solve problems.	
Year 1 – Position and Direction	• describe position, direction and movement, including whole, half, quarter and three-quarter turns	position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey left, right up, down forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from movement slide, roll, turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn
Year 2 – Position and Direction	• 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	higher, lower

	and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)	clockwise, anticlockwise
		right angle straight line
		route
		north, south, east, west, N, S, E, W
		horizontal, vertical, diagonal
Year 3 – UNIT NOT TAUGHT		
Year 4 – Position and Direction	• 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	north-east, north-west, south-east, south-west, NE, NW, SE, SW translate, translation rotate, rotation degree reflection ruler, set square angle measurer, compass
Year 5 – Position and Direction	• 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	coordinate protractor
Year 6 – Position and Direction	• 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	

Statistics - Statistics	

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Year 1 – UNIT NOT TAUGHT		
Year 2 – Statistics	• interpret and construct simple pictograms, tally charts, block diagrams and 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 totalling and comparing categorical data	count, sort, vote group, set list, table tally graph, block graph, pictogram represent label, title most popular, most common least popular, least common
Year 3 – Statistics	• interpret and present data using bar charts, pictograms and tables • solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	chart, bar chart, frequency table Carroll diagram, Venn diagram axis, axes diagram
Year 4 – Statistics	• interpret and 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 charts, pictograms, tables and other graphs	survey, questionnaire, data
Year 5 – Statistics	• solve comparison, sum and difference problems using information presented in a line graph • complete, read and interpret information in tables, including timetables	database bar line chart line graph maximum/minimum value outcome
Year 6 – Statistics	• interpret and construct pie charts and line graphs and use these to solve problems • calculate and interpret the mean as an average	pie chart mean (mode, median, range as estimates for this) statistics, distribution

Algebra – Algebra	

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Year 1 – UNIT NOT TAUGHT		
Year 2 – UNIT NOT TAUGHT		
Year 3 – UNIT NOT TAUGHT		
Year 4 – UNIT NOT TAUGHT		
Year 5 – UNIT NOT TAUGHT		
Year 6 – 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	