

Maths Whole School Progression

*For EYFS also see half termly progression document

Progression	EYFS*	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Number and	d Place Value			
	Count objects, actions and sounds	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number			Count backwards through zero to include negative number	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
Counting	Count beyond ten	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 or backward	Count from 0 in multiples of 4, 8, 50 and 100;	Count in multiples of 6, 7, 9, 25 and 1 000	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
	Understand 1 more than, 1 less than relationship between consecutive numbers	Given a number, identify one more and one less		Find 10 or 100 more or less than a given number	Find 1 000 more or less than a given number		
Comparing	Compare numbers (to ten)	Use the language of: equal to, more than, less than (fewer), most, least	Compare and order numbers from 0 up to 100; use <, > and = signs	Compare and order numbers up to 1 000	Order and compare numbers beyond 1 000	Read, write, order and compare numbers to at least 1 000 000 and determine the value	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (appears
Numbers					Compare numbers with the same number of decimal places up to two decimal places	of each digit (appears also in	also in Reading and Writing Numbers)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Identifying, representing and estimating numbers	Link the number symbol (numeral) with its cardinal number value Subitise	Identify and represent numbers using objects and pictorial representations including the number line	Identify, represent and estimate numbers using different representations, including the number line	Identify, represent and estimate numbers using different representations	identify, represent and estimate numbers using different representations		
Reading and Writing		Read and write numbers from 1 to 20 in numerals and words.	Read and write numbers to at least 100 in numerals and in words	Read and write numbers up to 1000 in numerals and in words Tell and write the	Read Roman	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit Read Roman	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
Numbers (including Roman numerals)				time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	numerals to 1000 (M) and recognise years written in Roman numerals.	
			Recognise the place value of each digit in a two-digit number (tens, ones)	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit	Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
Understanding Place Value					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 units, tenths and hundredths	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					Round any number to the nearest 10, 100 or 1 000	Round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000	Round any whole number to a required degree of accuracy
Rounding					Round decimals with one decimal place to the nearest whole number	Round decimals with two decimal places to the nearest whole number and to one decimal place	Solve problems which require answers to be rounded to specified degrees of accuracy
Problem Solving			Use place value and number facts to solve problems	Solve number problems and practical problems involving these ideas.	Solve number and practical problems that involve all of the above and with increasingly large positive numbers.	Solve number problems and practical problems that involve all of the above	Solve number and practical problems that involve all of the above
			Addition an	d Subtraction			
Number Bonds	Represent and use number bonds and related subtraction facts within 10	Represent and use number bonds and related subtraction facts within 20	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				
	Fluent for number bonds up to 5+5	Fluent for +0, +1, +2, +10, doubles to 5+5, 10+10, number bonds to make 10, +3 to 7+3, +4 to 6+4 (see Number facts grid)	Fluent for all number facts up to 10+10 including doubles and near doubles				

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mental Calculation	Automatically recall number bonds for numbers 0-5 and some to 10	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: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers	Add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and three-digit number and the sumber and the sumber and thundreds		Add and subtract numbers mentally with increasingly large numbers	Perform mental calculations, including with mixed operations and large numbers
		Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot				Use their knowledge of the order of operations to carry out calculations involving the four operations
Written Methods	Explore composition of numbers to 10	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs		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 (columnar addition and subtraction)	

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Inverse Operations, Estimating and Checking Answers			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	Estimate and use inverse operations to check answers to a calculation	Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.
Problem Solving		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 objects and pictorial representations, including those involving numbers, quantities and measures * applying their increasing knowledge of mental and written methods	Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Solve addition and subtraction two- step problems in contexts, deciding which operations and methods to use and why	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
			Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.				Solve problems involving addition, subtraction, multiplication and division

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	Multiplication and Division										
Multiplication	Distribute quantities evenly	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 or backward	Count from 0 in multiples of 4, 8, 50 and 100	Count in multiples of 6, 7, 9, 25 and 1 000	Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000					
and Division Facts			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						
Mental Calculation				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 and progressing to formal written methods (appears also in Written 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	Multiply and divide numbers mentally drawing upon known facts	Perform mental calculations, including with mixed operations and large numbers				
			Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot		Recognise and use factor pairs and commutativity in mental calculations	Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3 /8)				

mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (*), division (÷) and equals (=) signs mathematical statements for multiplication (*), division (*) and progressing to formal written methods calculate mathematical mathematical statements for multiplication and division using the multiplication (*), division (*) and equals (=) signs mathematical mathematical mathematical statements for multiplication and division using the multiplication and division using the multiplication tables that they know, including for two-digit numbers with the multiplication and equals (=) signs mathematical mathematical statements for multiplication and division using the multiplication for two-digit numbers with the statements for multiplication and division using the multiplication and division using the multiplication for two-digit numbers with a formal written layout mathematical statements for multiplication and division using the multiplication for two-digit numbers with a formal written and progressing for and written and progressing for and division using the multiplication and division using the multiplication and division using the multiplication for two-digit numbers with a formal written and progressing to a network of two-digit numbers by a one-digit number using the multiplication and division using the		EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
remainders appropriately for the context divide numbers up to 4 of by a 2-digit whole number using the formal written me of long division, a interpret remaind as whole number remainders, fraction or by rounding, as appropriate for the context. Use written division methods in cases where the answe	_			mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and	calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written	and three-digit numbers by a one digit number using formal written	to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit 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	division where appropriate for the context divide numbers up to 4 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 Use written division methods in cases where the answer has up to two decimal

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Properties of numbers: Multiples, factors, prime, square and cube numbers					Recognise and use factor pairs and commutativity in mental calculations (repeated)	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) number Establish whether a number up to 100 is prime and recall prime numbers up to 19 Recognise and use square numbers, and the notation for squared (2) and cubed (3)	Identify common factors, common multiples and prime numbers Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm 3) and cubic metres (m 3), and extending to other units such as mm 3 and km 3
Order of operations							Use their knowledge of the order of operations to carry out calculations involving the four operations
Inverse operations, estimating and checking answers				Estimate the answer to a calculation and use inverse operations to check answers	Estimate and use inverse operations to check answers to a calculation		Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Problem Solving		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	Solve problems involving addition, subtraction, multiplication and division Solve problems involving similar shapes where the scale factor is known or can be found
		FRACTIO	DNS (including DEC	CIMALS AND PER	CENTAGES)	simple rates	
Counting in fractional steps			Pupils should count in fractions up to 10, starting from any number and using the 1/2 and 2/4 equivalence on the number line (Non Statutory Guidance)	Count up and down in tenths	Count up and down in hundredths		
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 / 3 , 1 / 4 , 2 / 4 and 3 / 4 of a	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-	Recognise that hundredths arise when dividing an object by one hundred and	Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	

Recognising Fractions		length, shape, set of objects or quantity	unit fractions with small denominators	dividing tenths by ten		
Traciions	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity		Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. Recognise and use fractions as numbers: unit fractions and nonunit fractions with small denominators			
Comparing Fractions			Compare and order unit fractions, and fractions with the same denominators		Compare and order fractions whose denominators are all multiples of the same number	Compare and order fractions, including fractions >1
Comparing Decimals				Compare numbers with the same number of decimal places up to two decimal places	Read, write, order and compare numbers with up to three decimal places	Identify the value of each digit in numbers given to three decimal places
Rounding, including decimals				Round decimals with one decimal place to the nearest whole number	Round decimals with two decimal places to the nearest whole number and to one decimal place	Solve problems which require answers to be rounded to specified degrees of accuracy
Equivalence, including fractions,		Write simple fractions e.g. 1 / 2 of 6 = 3 and recognise the equivalence of 2 / 4 and 1 / 2.	Recognise and show, using diagrams, equivalent fractions with small denominators	Recognise and show, using diagrams, families of common equivalent fractions	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
decimals and percentages				Recognise and write decimal equivalents of any number of tenths or hundredths	read and write decimal numbers as fractions (e.g. 0.71 = 71 / 100) Recognise and use thousandths and relate them to tenths,	Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3 / 8)

				hundredths and decimal equivalents	
			Recognise and write decimal equivalents to 1 / 4; 1 / 2; 3 / 4	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 as a decimal fraction	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Addition and Subtraction of Fractions		Add and subtract fractions with the same denominator within one whole (e.g. 5 / 7 + 1 / 7 = 6 / 7)	Add and subtract fractions with the same denominator	Add and subtract fractions with the same denominator and multiples of the same number Recognise mixed numbers fractions and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. 2 / 5 + 4 / 5 = 6 / 5 = 1 1 / 5)	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent
Multiplication and Division of Fractions				Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1 $/ 4 \times 1 / 2 = 1 / 8$) Multiply one-digit numbers with up to two decimal places by whole numbers Divide proper fractions by whole numbers (e.g. $1 / 3 \div 2 = 1 / 6$)

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Multiplication and division of decimals							Multiply one-digit numbers with up to two decimal places by whole numbers
					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		Multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
							Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
							Associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3/8)
							Use written division methods in cases where the answer has up to two decimal places

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Problem Solving				Solve problems that involve all of the above.	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	Solve problems involving numbers up to three decimal places	
					Solve simple measure and money problems involving fractions and decimals to two decimal places.	Solve problems which require knowing percentage and decimal equivalents of 1/2,1/4,1/5,2/5,4/5 and those with a denominator of a multiple of 10 or 25	
S	itatements only ap	pear in Y6 but should I		PROPORTION vious learning, partic	cularly fractions and		ision
Ratio and							solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
Proportion							solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ratio and Proportion							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
			Measi	urement			
Comparing and Estimating	Compare length, weight and capacity	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]	Compare and order lengths, mass, volume/capacity and record the results using >, < and =		Estimate, compare and calculate different measures, including money in pounds and pence	Calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm 2) and square metres (m 2) and estimate the area of irregular shapes Estimate volume (e.g. using 1 cm 3 blocks to build cubes and cuboids) and capacity (e.g. using water)	Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm 3) and cubic metres (m 3), and extending to other units such as mm 3 and km 3.
		Sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	Compare and sequence intervals of time	Compare durations of events, for example to calculate the time taken by particular events or tasks			

Comparing and Estimating			Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight		
Measuring and Calculating	Measure and begin to record the following: * lengths and heights * mass/weight * capacity and volume * time (hours, minutes, seconds)	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	Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Estimate, compare and calculate different measures, including money in pounds and pence	
			Measure the perimeter of simple 2-D shapes	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	

	Do o o o o o o o	De ce surie e sur el	A al al ava al			
	Recognise and	Recognise and	Add and			
	know the value of	use symbols for	subtract			
	different	pounds (£) and	amounts of			
	denominations of	pence (p);	money to give			
	coins and notes	combine amounts	change, using			
		to make a	both £ and p in			
		particular value	practical			
		Find different	contexts			
		combinations of				
		coins that equal				
		the same amounts				
		of money				
		Solve simple				
		problems in a				
		practical context				
		involving addition				
		and subtraction of				
Measuring		money of the				
_		same unit,				
and		including giving				
Calculating		change				
				Find the area of	Calculate and	Calculate the area
				rectilinear	compare the area	of parallelograms
				shapes by	of squares and	and triangles
				counting squares	rectangles	S
				0 141	including using	
					standard units,	
					square centimetres	Calculate, estimate
					(cm 2) and square	and compare
					metres (m 2) and	volume of cubes
					estimate the area	and cuboids using
					of irregular shapes	standard units,
					recognise and use	including cubic
					square numbers	centimetres (cm 3)
					and cube	and cubic metres
					numbers, and the	(m 3), and
					notation for	extending to other
					squared (2) and	units [e.g. mm 3
					cubed (3)	and km 3].

						Recognise when it is possible to use formulae for area and volume of shapes
	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	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	Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	Read, write and convert time between analogue and digital 12 and 24-hour clocks		
Telling the Time	Recognise and use language relating to dates, including days of the week, weeks, months and years	Know the number of minutes in an hour and the number of hours in a day.	Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight			
Telling the Time				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	

		Know the number of minutes in an hour and the number of hours in a day	Know the number of seconds in a minute and the number of days in each month, year and leap year	Convert between different units of measure (e.g. kilometre to metre; hour to minute)	Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)	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
Converting				Read, write and convert time between analogue and digital 12 and 24- hour clocks	Solve problems involving converting between units of time	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
				Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	Convert between miles and kilometres

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		GEOMETRY – PRO	OPERTIES OF SHA	PE		
Compose and decompose shapes so that children recognise a shape can have other shapes within it	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].	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 the radius surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]		Identify lines of symmetry in 2-D shapes presented in different orientations	Identify 3-D shapes, including cubes and other cuboids, from 2-D representations	Recognise, describe and build simple 3-D shapes, including making nets Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice identify 2-D shapes on the the radius

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Drawing and Constructing				Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	Complete a simple symmetric figure with respect to a specific line of symmetry	Draw given angles, and measure them in degrees (o)	Draw 2-D shapes using given dimensions and angles Recognise, describe and build simple 3-D shapes, including making nets
Comparing and Classifying			Compare and sort common 2-D and 3-D shapes and everyday objects		Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	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	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
				Recognise angles as a property of shape or a description of a turn		<u> </u>	Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
Angles				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	Identify acute and obtuse angles and compare and order angles up to two right angles by size	Identify: * angles at a point and one whole turn (total 360 o) * angles at a point on a straight line and ½ a turn (total 180 o) * other multiples of 90 o	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

				angles are greater than or less than a right angle Identify horizontal and vertical lines and pairs of perpendicular and parallel line			
		(GEOMETRY – POSIT	ON AND DIRECT	ION		
Position, Direction and	Select, rotate and manipulate shapes to develop spatial reasoning skills	Describe position, direction and movement including half, quarter and three quarter turns	Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation		Describe positions on a 2d grid as coordinates in the first quadrant	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)
Movement			as a turn and in terms of a right angle for quarter, half and three quarter turns (clockwise and anti-clockwise)		Describe movements between positions as translations of a given movement to the left / right and up / down		Draw and translate simple shapes on the coordinate plane and reflect them in the axis
					Plot specified points and draw sides to complete a given polygon		

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Pattern	Continue and copy a repeating pattern		Order and arrange combinations of mathematical objects in patterns and sequences				
			STA	TISTICS			
Interpreting, constructing and presenting 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 and use these to solve problems
			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				
Solving problems				Solve one-step and 2 step questions using information presented in scaled bar charts, 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	Calculate and interpret the mean as average

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	ALGEBRA										
Equations		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems Recall and use	Solve problems including missing number problems using number facts, place value and more complex addition and subtraction Solve problems including missing number problems involving multiplication and division, including integer scaling		Use the properties of rectangles to deduce related facts and find missing lengths and angles	Express missing number problems algebraically Find pairs of				
			addition and subtraction facts to 20 fluently and derive and use related facts up to 100				numbers that satisfy number sentences involving two unknowns				
		Represent and use number bonds and related subtraction facts within 20					Enumerate all possibilities of combinations of two variables				
					Perimeter can be expressed algebraically as		Use simple formulae				
Formulae					2(a+b) where a and b are the dimensions in the same unit		Recognise when it is possible to use formulae for area and volume of shapes				

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Explore and represent patterns in numbers up to	Sequence events in chronological order using language such as:	Compare and sequence intervals of time				Generate and describe linear number sequences
Sequences	10, including even and odd and doubles facts	before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening	Order and arrange combinations of mathematical objects in patterns				