	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	
Numb er – Numb er and Place Value	To recite numbers in order to 10. To realise not only objects, but anything can be counted including steps, claps or jumps. To count up to three or four objects by saying one number name for each item. To count out up to six objects from a larger group. To count actions or objects which cannot be moved. To count objects to 10 and beginning to count an irregular arrangement of up to ten objects. To estimate how many objects they can see and check by counting them. To count reliably with numbers from one to 20 To show curiosity about numbers by offering comments or	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens 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, least Read and write numbers from 1 to 20 in numerals and words	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations, including the number line Compare and order numbers from 0 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	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 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, 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	Count in multiples of 6, 7, 9, 25 and 1000 Find 1000 more or less than a given number Count backwards through zero to include negative numbers Recognise the place value of each digit in a four-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 10, 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 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 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Round any number up to 1 000 000 to the nearest 10, 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	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

	asking questions To show an interest in number problems To being to identify own						
	mathematical problems based on own interest and fascination						
	To say the number that is one more than a given number. To find one more or one less from a group of up to five objects, then ten objects. To say which number is one more or one less than a given number from one to 20. To compare two groups of objects, saying when they have the same number. To use the language of 'more' and 'fewer' to compare two sets of objects. To place numbers one to 20 in order.						
0 0110 01 01	To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion. To find the total of items in two groups by	Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs Represent and use number bonds and related subtraction facts within 20	Solve problems with addition and subtraction: -using concrete objects and pictorial representations, including those involving numbers, quantities and measures	Add and subtract numbers mentally, including: -a three-digit number and ones -a three-digit number and tens -a three-digit number and hundreds	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) Add and subtract numbers mentally with	Number – Addition, Subtraction, Multiplication and Division Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the

	counting all of them To add and subtract two single-digit numbers and count on and back to find the answer using quantities and objects To say which number is one more or one less than a given number from one to 20. To solve problems, including doubling, halving and sharing.	Add and subtract 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, and missing number problems	-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 two-digit number and ones -a two-digit numbers and tens -two two-digit numbers -adding three one-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 use this to check calculations and solve missing number problems	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	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.	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	formal written method of long multiplication Divide numbers up to 4 digits by a two-digit whole number using formal the 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, common multiples and prime numbers Use their knowledge of
Multip		Solve one-step problems	Recall and use	Recall and use	Recall multiplication and	Identify multiples and	the order of operations
licatio		involving multiplication and	multiplication and	multiplication and division	division facts for	factors, including finding	to carry out calculations
n and		division, by calculating the	division facts for the 2, 5				

Distal		and 10 modelinities time	foots fourths 2 A and 2	manulatin linnakin mahalan	all factor nains of a	in a la in a Ala a fa
Divisio	answer using concret		facts for the 3, 4 and 8	multiplication tables up	all factor pairs of a	involving the four
n	objects, pictorial	tables, including	multiplication tables	to 12 × 12	number, and	operations
	representations and		Marks and salardaka	Use place value, known	common factors of two	Calva addition and
	with the support of t	ne numbers	Write and calculate	and derived facts to	numbers	Solve addition and
	teacher		mathematical statements	multiply and divide		subtraction multi-step
		Calculate mathematical	for multiplication and	mentally, including:	Know and use the	problems in contexts,
		statements for	division using the	multiplying by 0 and 1;	vocabulary of prime	deciding which
		multiplication and	multiplication tables that	dividing by 1; multiplying	numbers, prime factors	operations and
		division within the	they know, including for	together three numbers	and composite	methods to use and
		multiplication tables and	two-digit numbers times		(nonprime) numbers	why
		write them using the	one-digit numbers, using	Recognise and use factor		
		multiplication (×), division	mental and progressing to	pairs and commutativity	Establish whether a	Solve problems
		(÷) and equals (=) signs	formal written methods	in mental calculations	number up to 100 is	involving addition,
					prime and recall prime	subtraction,
		Show that multiplication	Solve problems, including	Multiply two-digit and	numbers up to 19	multiplication and
		of two numbers can be	missing number problems,	three-digit numbers by a		division
		done in any order	involving multiplication and	one-digit number using	Multiply numbers up to 4	
		(commutative) and	division, including positive	formal written	digits by a one- or two-	Use estimation to check
		division of one number by	integer scaling problems	layout	digit number using a	answers to calculations
		another cannot	and correspondence		formal written method,	and determine, in the
			problems in which n objects	Solve problems involving	including long	context of a
		Solve problems involving	are connected to m objects	multiplying and adding,	multiplication for two-	problem, an
		multiplication and		including using the	digit numbers	appropriate degree of
		division, using materials,		distributive law to		accuracy
		arrays, repeated addition,		multiply two digit	Multiply and divide	
		mental methods, and		numbers by one digit,	numbers mentally	
		multiplication and		integer scaling problems	drawing upon known	
		division facts, including		and harder	facts	
		problems in contexts		correspondence		
		·		problems such as n	Divide numbers up to 4	
				objects are connected to	digits by a one-digit	
				m objects.	number using the formal	
				<u> </u>	written method	
					of short division and	
					interpret remainders	
					appropriately for the	
					context	
					Context	
					Multiply and divide whole	
					numbers and those	
					Humbers and those	1

						involving decimals by 10, 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	
Fractio ns		Recognise, find and name a half as one of two equal parts	Recognise, find, name and write fractions 1/3 ¼	Count up and down in tenths; recognise that	Recognise and show, using diagrams, families	Compare and order fractions whose	Use common factors to simplify fractions; use
(includ		of an object, shape or	2/4 % of a length, shape,	tenths arise from dividing	of common equivalent	denominators are all	common multiples to
ing		quantity	set of objects or quantity	an object into 10 equal	fractions	multiples of the same	express fractions in the
decim				parts and in dividing one-		number	same denomination
als		Recognise, find and name a	Write simple fractions for	digit numbers or quantities	Count up and down in	Identify name and write	Compare and order
and percen		quarter as one of four equal parts of an object, shape or	example, ½ of 6 = 3 and recognise the equivalence	by 10	hundredths; recognise that hundredths arise	Identify, name and write equivalent fractions of a	Compare and order fractions, including
tages)		quantity.	of 2/4 and ½		when dividing an object	given fraction,	fractions > 1
tugesj	1	quantity.	O1 2/7 0110 /2		which dividing an object	Biven naction,	Hactions / 1



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	Recognise, find and write	by one hundred and	represented visually,	
	fractions of a discrete set of	dividing tenths by ten	including tenths and	Add and subtract
	objects: unit fractions and		hundredths	fractions with different
	non-unit fractions with	Solve problems involving		denominators and
	small denominators	increasingly harder	Recognise mixed	mixed numbers, using
		fractions to calculate	numbers and improper	the concept of
	Recognise and use fractions	quantities, and	fractions and convert	equivalent fractions
	as numbers: unit fractions	fractions to divide	from one form to the	
	and non-unit fractions with	quantities, including non-	other and write	Multiply simple pairs of
	small denominators	unit fractions where the	mathematical statements	proper fractions,
		answer is a whole	> 1 as a mixed number	writing the answer in its
	Recognise and show, using	number	[for example, 2/5 + 4/5 =	simplest form [for
	diagrams, equivalent		6/5 = 1 1/5]	example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$
	fractions with small	Add and subtract	, , , , ,	F = 7 : 7 = 1
	denominators	fractions with the same	Add and subtract	Divide proper fractions
		denominator	fractions with the same	by whole numbers [for
	Add and subtract fractions		denominator and	example, $1/3 \div 2 = 1/6$
	with the same denominator	Recognise and write	denominators that are	1
	within one whole [for	decimal equivalents of	multiples of the same	1
	example, 5/7 + 1/7 = 6/7]	any number of tenths or	number	Associate a fraction
	Compare and order unit	hundredths	Hamber	with division and
	fractions, and fractions with	Translated this	Multiply proper fractions	calculate decimal
	the same denominators	Recognise and write	and mixed numbers by	fraction equivalents [for
	the same denominators	decimal equivalents to 1/4	whole numbers,	example, 0.375] for a
	Solve problems that involve	½ ¾	supported by materials	simple fraction [for
	all of the above.	Find the effect of dividing	and diagrams	example, 3/8]
	all of the above.	a one- or two-digit	Read and write decimal	Identify the value of
		number by 10 and 100,	numbers as fractions [for	each digit in numbers
		identifying the	example, 0.71 = 71/100]	given to three decimal
		value of the digits in the	example, 0.71 = 71/100]	places and multiply and
		_	December and use	1 '
		answer as ones, tenths	Recognise and use thousandths and relate	divide numbers by 10, 100 and 1000 giving
		and hundredths		
		Daynad daginaalayyikh ana	them to tenths,	answers up to three
		Round decimals with one	hundredths and decimal	decimal places
		decimal place to the	equivalents	NAMES OF THE PARTY
		nearest whole number		Multiply one-digit
			Round decimals with two	numbers with up to two
		Compare numbers with	decimal places to the	decimal places by
		the same number of	nearest whole number	whole numbers
			and to one decimal place	

					decimal places up to two decimal places Solve simple measure and money problems involving fractions and decimals to two decimal places	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 Solve problems which require knowing percentage and decimal equivalents of ½ ¼ 1/5 2/5 4/5 and those fractions with a denominator of a multiple of 10 or 25.	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
Measu remen t	To begin to use everyday language related to money To use everyday language related to time. To order and sequence familiar events. To measure	Compare, describe and solve practical problems for: -lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] -mass/weight [for example, heavy/light, heavier than, lighter than] -capacity and volume [for example, full/empty, more	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 (I/mI) Measure the perimeter of simple 2-D shapes Add and subtract amounts of money to give change, using both £ and p in practical contexts	Convert between different units of measure [for example, kilometre to metre; hour to minute] Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) Understand and use approximate	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,

short periods of time in	than, less than, half, half full,			Find the area of	equivalences between	converting
•	quarter]	Compare and order	Tell and write the time	rectilinear shapes by	metric units and common	measurements of
simple ways.	- time [for example, quicker,	lengths, mass,	from an analogue clock,	counting squares	imperial units such as	length, mass, volume
	slower, earlier, later]	volume/capacity and	including using Roman		inches, pounds and pints	and time from a smaller
		record the results using >,	numerals from I to XII, and	Estimate, compare and		unit of measure to a
	Measure and begin to record	< and =	12-hour and 24-hour clocks	calculate different	Measure and calculate	larger unit, and vice
	the following:			measures, including	the perimeter of	versa, using decimal
	-lengths and heights -	Recognise and use	Estimate and read time	money in pounds and	composite rectilinear	notation to up to three
	mass/weight	symbols for pounds (£)	with increasing accuracy to	pence	shapes in centimetres	decimal places
	- capacity and volume	and pence (p); combine	the nearest minute; record		and metres	
	- time (hours, minutes,	amounts to make a	and compare time in terms	Read, write and convert		Convert between miles
	seconds)	particular value	of seconds, minutes and	time between analogue	Calculate and compare	and kilometres
			hours; use vocabulary such	and digital 12- and 24-	the area of rectangles	
	Recognise and know the	Find different	as o'clock, a.m./p.m.,	hour clocks	(including squares), and	Recognise that shapes
	value of different	combinations of coins	morning, afternoon, noon		including	with the same areas
	denominations of coins and	that equal the same	and midnight	Solve problems involving	using standard units,	can have different
	notes	amounts of money		converting from hours to	square centimetres (cm²)	perimeters and vice
			Know the number of	minutes; minutes to	and square metres (m²)	versa
	Sequence events in	Solve simple problems in	seconds in a minute and	seconds;	and estimate	
	chronological order using	a practical context	the number of days in each	years to months; weeks	the area of irregular	Recognise when it is
	language [for example,	involving addition and	month, year and leap year	to days	shapes	possible to use
	before and after, next, first,	subtraction of money of				formulae for area and
	today, yesterday, tomorrow,	the same unit, including	Compare durations of		Estimate volume [for	volume of shapes
	morning, afternoon and	giving change	events [for example to		example, using 1 cm3	
	evening]		calculate the time taken by		blocks to build cuboids	Calculate the area of
		Compare and sequence	particular events or tasks].		(including cubes)]	parallelograms and
	Recognise and use language	intervals of time			and capacity [for	triangles
	relating to dates, including	Tall and white the time at a			example, using water]	Calaulata astimasta and
	days of the week, weeks,	Tell and write the time to			Solve problems involving	Calculate, estimate and compare volume of
	months and years	five minutes, including quarter past/to the hour			converting between units	cubes and cuboids
	Tell the time to the hour and	and draw the hands on a			of time	using standard units,
	half past the hour and draw	clock face to show these			of time	including cubic
	the hands on a clock face to	times			Use all four operations to	centimetres (cm³) and
	show these times	tilles			solve problems involving	cubic metres (m³), and
	Show these times	Know the number of			measure [for example,	extending to other units
		minutes in an hour and			length, mass, volume,	[for example, mm ³ and
		the number of hours in a			money] using decimal	km ³].
		day.			notation, including	Kill J.
		auy.			scaling.	
		1	<u> </u>	1	Jeaning.	

Geom etry - Proper ties of Shape	comi inclu - 2-D recta squa trian -3-D cubo	nmon 2-D and 3-D shapes, uding: D shapes [for example, tangles (including ares), circles and ngles] D shapes [for example, toids (including cubes), amids 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 surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] Compare and sort common 2-D and 3-D shapes and everyday objects.	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	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	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°) -angles at a point on a straight line and ½ 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.	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.
Geom etry – Positio n and Directi on	and i	I movement, including ole, half, quarter and	Order and arrange combinations of mathematical objects in patterns and sequences		Describe positions on a 2-D grid as coordinates in the first quadrant Describe movements between positions as	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that	Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the

Statisti		Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise) 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	Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.	translations of a given unit to the left/right and up/down Plot specified points and draw sides to complete a given polygon 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	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 line graphs and use these to solve problems Calculate and interpret the mean as an average
Ratio and Propor tion						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
				companison
				Calva mualdama
				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
Algebr				Use simple formulae
а				
				Generate and describe
				linear number
				sequences
				Express missing number
				problems algebraically
				problems algebraicany
				Find pairs of numbers
				that satisfy an equation
				with two unknowns
				Enumerate possibilities
				of combinations of two
				variables.