

	EYFS	KS	1	KS2
	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3
Mathematical Vocabulary	Use a wider range of vocabulary. Understand 'why' questions, like: "why do you think the caterpillar is so fat?" Learn new vocabulary. Use new vocabulary throughout the day. Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.	To read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at year 1.	To read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.	To read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.



Z	EYFS	KS	1	KS2
umber and Pla	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
lace Value	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3



	Recite numbers past 5.	To count to and across 100, forwards and	To count in stone of 2.2 and 5 from	To continue to count in
	Say one number name for each	backwards, beginning with 0 or 1, or from	O and in tang from any number	ones, tens and
	item in order: 1, 2, 3, 4, 5.	any given number.	O, and in tens from any number,	hundreds, so that
	Know that the last number	To identify one more and one less than a	forwara ana backwara.	pupils become fluent in
	reached when counting a small	given number.		the order and place
	set of objects tells you how	To count in multiples of twos, fives and tens		value of numbers to
	many there are in total	from different multiples to develop their		1000.
	('cardinal principle').	recognition of patterns in the number		To count from 0 in
		system, including varied and frequent		multiples of 4, 8, 50
	Count objects, actions and	practice through increasingly complex		and 100.
	sounds.	questions.		
	Count beyond ten.	To recognice and create repeating		
_		notterne with objects and with change		
Cor	Verbally count beyond 20,	putterns with objects and with shapes.		
Int	recognising the pattern of the			
ing	counting system.			



	Develop fast recognition of up	fast reco	nition of up
	to 3 objects, without having	ojects, with	out having
	to count them individually	int them i	dividually
	('subitising')	('subitisir	'')
Idantifuin	Show 'finger numbers' up to 5.	ʻfinger nu 5.	bers' up to
,	Link numerals and amounts:	umerals a	d amounts:
	for example, showing the	xample, sl	owing the
	right number of objects to	number c	objects to
	match the numeral, up to 5.	the nume	al, up to 5.
-	Experiment with their own	iment wit	their own
	symbols and marks as well	ols and m	ks as well
	as numerals.	as nume	als.
	Subitise.	Subitis	
umbers	Link the number symbol	the numb	r symbol
	(numeral) with its cardinal	eral) with	s cardinal
	number value.	number v	llue.
	Subitise (recognising	bitise (rec	gnising
	quantities without counting)	ties withc	t counting)
	up to 5.	up to	



Reading and Writing Numbers	Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Link the number symbol (numeral) with its cardinal number value.	To read and write numbers from 1 to 20 in numerals and words. To count, read and write numbers to 100 in numerals.	To read and write numbers to at least 100 in numerals and in words.	To read and write numbers up to 1000 in numerals and in words.
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	Compare quantities using language: 'more than', 'fewer than'.	To compare and order numbers from 0 up to 100; use <, > and = signs.	To compare and order numbers up to 1000.
	Compare numbers.		
ompare and Order Numbers	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.		



Understanding Place Value	A/one less than' relationship ween consecutive numbers. Applore the composition of numbers to 10. We a deep understanding of nbers to 10, including the nposition of each number.		digit in a two-digit number (tens, ones) to become fluent and apply their knowledge of numbers to reason with, discuss and solve problems. To begin to understand zero as a place holder.	To recognise the place value of each digit in a three-digit number (hundreds, tens, ones) and apply partitioning related to place value using varied and increasingly complex problems, building on work in year 2 (for example, 146 = 100 + 40 and 6, 146 = 130 + 16).
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Rounding		
Roman Numerals		



Solve Problems	Solve real world mathematical problems with numbers up to 5.	To practise ordinal numbers and solve simple concrete problems.	To use place value and number facts to solve <i>related</i> problems <i>to develop</i> <i>fluency.</i>	To solve number problems and practical problems involving these ideas.



	EYFS	KS	51	KS2
Addition (Subtracti	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
and	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3
Mental Calculations	Automatically recall number bonds for numbers 0-5 and some to 10. 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.	To add and subtract one-digit and two- digit numbers to 20, including zero. <i>To realise the effect of adding or</i> <i>subtracting zero.</i>	To extend the language of addition and subtraction to include sum and difference. To show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. To add and subtract numbers using an efficient strategy, explaining their method verbally using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers, add three one-digit numbers.	To add and subtract numbers mentally, including: <i>two-digit</i> <i>numbers, where the</i> <i>answers could exceed</i> <i>100,</i> a three-digit number and ones, a three-digit number and tens and a three- digit number and hundreds.



Number Bonds	To <i>memorise</i> , represent and use number bonds and related subtraction facts within 20.	To recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships. To recall and use addition and subtraction facts to 20 to become fluent in deriving associative facts (e.g. 10 - 7 = 3, 100 - 70 = 30) and derive and use related facts up to 100.	
Written Calculations	To read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.	To begin to record addition and subtraction in columns to support place value and prepare for formal written methods with larger numbers	To use the understanding of place value and partitioning to enable adding and subtracting numbers with up to three digits, using formal written methods of columnar addition and subtraction to become fluent.



Inverse Operations, Estimation and Checking Answers			To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	To estimate the answer to a calculation and use inverse operations to check answers.
Order of Operations				
Solve Problems	Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.	To discuss and solve one-step problems (in familiar practical contexts) that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. Problems include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that pupils develop the concept of addition and subtraction and are enable to use these operations flexibly.	To 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.	

Banks Lane Infant and Nursery School

Whole-School Mathematics Progression Map



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1ultiplicatic Divisio	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
on and n	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3



Mental Calculations			To begin to use other multiplication tables and recall multiplication facts, including using related division facts to perform written and mental calculations. To begin to relate multiplication and division facts to fractions and measures (e.g., 40 ÷ 2 = 20, 20 is a half of 40). To show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot, to develop multiplicative reasoning.	To write 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 <i>efficient</i> mental <i>methods, for</i> <i>example, using</i> <i>commutativity and</i> <i>associativity,</i> and progressing to formal <i>reliable</i> written methods <i>of</i> <i>short multiplication</i> <i>and division.</i>
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	T ()	T CL III	T II I
	To make connections between arrays, number patterns, and counting in twos, fives and tens. Through grouping and sharing small	To use a variety of language to describe multiplication and division. To count from 0 in multiples of 4, 8, 50 and 100.	To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
Multiplication and Division Facts	quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities.	To recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers and use them to solve simple problems, demonstrating an understanding of commutativity as necessary. To connect the 10 multiplication table to place value, and the 5 multiplication table to the divisions on the clock face.	when they are calculating mathematical statements in order to improve fluency. To connect the 2, 4 and 8 multiplication tables through doubling.



Written Calculation		To calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. To begin to use other multiplication tables and recall multiplication facts, including using related division facts to perform written and mental calculations.	To write 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 <i>efficient</i> mental <i>methods, for</i> <i>example, using</i> <i>commutativity and</i> <i>associativity,</i> and progressing to formal <i>reliable</i> written methods <i>of short multiplication</i> <i>and division. (included</i> <i>in mental calculation</i> <i>section)</i>
Properties of Numbers			
Order of Operations			



Solve Problems	To 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.	To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	To solve simple problems in contexts, deciding which of the four operations to use and why. These include missing number problems, involving multiplication and division, including <i>measuring</i> and positive integer scaling problems and correspondence problems in which n objects are connected to m objects.



Fr	EYFS	KS	1	KS2
actions, Decir Percentag	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
nals and es	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3
Counting			To count in fractions up to 10, starting from any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line.	To count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one- digit numbers or quantities by ten.



Recognising, Finding and Naming Fractions	To recognise, find and name a half as one of two equal parts of an object, shape or quantity by solving problems. To recognise, find and name a quarter as one of four equal parts of an object, shape or quantity by solving problems. To connect halves and quarters to the equal sharing and grouping of sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole.	To recognise, find, name, identify and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ of a length, number, shape, set of objects or quantity and know that all parts must be equal parts of the whole. To connect unit fractions to equal sharing and grouping, to numbers when they can be calculated, and to measures, finding fractions of lengths, quantities, sets of objects or shapes. They meet $\frac{3}{4}$ as the first example of a non-unit fraction.	To understand the relation between unit fractions as operators (fractions of), and division by integers. To recognise, understand and use fractions as numbers: unit fractions and non- unit fractions and non- unit fractions with small denominators as numbers on the number line (going beyond 0 -1 and relating this to measure), and deduce relations between them, such as size and equivalence. To recognise, find and write fractions of a discrete set of objects:
ions			To recognise, find and write fractions of a discrete set of objects: unit fractions and non- unit fractions with small denominators.



Comparing and Ordering			To compare and order unit fractions, and fractions with the same denominators.
Adding and Subtracting			To add and subtract fractions with the same denominator within one whole through a variety of increasingly complex problems to improve fluency.
Multiplying and Dividing Fractions			
Equivalence		To write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence $\frac{2}{4}$ and $\frac{1}{2}$.	To recognise and show, using diagrams, equivalent fractions with small denominators.



Comparing and Ordering Decimals		
Rounding Decimals		
Adding and Subtracting Decimals		
Multiplying and Dividing Decimals		
Solve Problems		To solve problems that involve all of the above.



	EYFS	KS	1	KS2
Algebr	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
م 	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3
Algebra				



	EYFS	KS	KS 1	
Measurer	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
ement	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3



Describe, Measure, Compare and Solve (All Strands)	Make comparisons between objects relating to size, length, weight and capacity. Compare length, weight and capacity.	To compare, describe and solve practical problems for: lengths and heights, mass/weight, capacity and volume, time. To measure and begin to record the following: lengths and heights, mass/weight, capacity and volume, time. To move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units using measuring tools, such as a ruler, weighing scales and containers	To choose and use appropriate standard units with increasing accuracy using their knowledge of the number system 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. To use the appropriate language and record using standard abbreviations. To compare and order lengths, mass, volume/capacity and record the results using >, < and =. To compare measures including simple multiples such as 'half as high'; 'twice as wide'	To measure using the appropriate tools and units, compare (including simple scaling by integers) add and subtract using mixed units: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).
Converting Units of Measure (All Strands)				



		To sequence events in chronological order	To read tell and write the time to five	To tell and write the time
	Regin to describe a sequence		minutes including quarter past/to the	from an analoque clock,
	of events real or fictional	using language.	have the left have and drave the hands on	including using Roman
			nour/half nour and araw the hands on	numerals from I to XII, and
	using words, such as first,	To recognise and use language relating to	a clock face to show these times.	12-hour and 24-hour clocks.
Telling the Time	using words, such as 'first', 'then'	To recognise and use language relating to dates, including days of the week, weeks, months and years. To tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	a clock face to show these times. <i>To become fluent in telling the time on</i> <i>analogue clocks and recording it.</i> To know the number of minutes in an hour and the number of hours in a day. To compare and sequence intervals of time.	numerals from 1 to XII, and 12-hour and 24-hour clocks. <i>To begin to use digital 12-hour clocks and record their times in preparation for using digital 24-hour clocks in year 4.</i> To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours. To use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. To know the number of seconds in a minute and the number of days in each month, year and leap year.
				events.



			•
	To recognise and know the value of	To become fluent in counting and	To become fluent in
	different denominations of coins and notes.	recognising coins.	recognising the value
		To recognize and use sumbols for	of coins.
		To recognise and use symbols for	To odd and subtract
		pounds (£) and pence (p) accurately,	
		recording pounds and pence separately;	manageable amounts of
7		combine amounts to make a particular	money, <i>including mixed</i>
1 or		Value.	units, to give change,
ıey		To find and use different combinations	using both £ and p in
		of coins that equal the same amounts of	practical contexts.
		money.	
		To solve simple problems in a practical	
		context involving addition and	
		subtraction of money of the same unit,	
		incluaing giving change.	T
P			To measure the
erir			perimeter of simple 2D
ne			snapes.
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ู่ใน			
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	EYFS	KS	KS 1	
Properties of Shapes	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3



	Talk about and explore 2D	To recognise, <i>handle</i> and name common	Pupils read and write names for shapes	To describe the
Re	and 3D shapes (for example,	2D and 3D shapes in different	that are appropriate for their word	properties of 2D and
čo	circles, rectangles, triangles	orientations/sizes and relate everyday	reading and spelling.	3D shapes using
gni	and cuboids) using informal	objects fluently.	To <i>handle</i> identify and describe the	accurate language.
se	and mathematical language:	To recognize that rectangles triangles	properties of 2D shapes including the	To extend knowledge
2D	'sides', 'corners', 'straight',	To recognise that rectangles, thangles,	number of sides and line summetry in a	of the properties of
a	ʻflat', ʻround'.	cuboids and pyramids are not always	vertical line	shapes is extended at
h		similar to each other.	verticut titte.	this stage to
3D	Select shapes appropriately:		To <i>handle</i> , identify and describe the	summatrical and non
LS S	flat surfaces for a building. a		properties of 3D shapes, including the	symmetrical polyaon
Lap	triangular pattern for a roof.		number of edges, vertices and faces.	and polybodron
es	etc.		To identify 2D shapes on the surface	απά ροιθπεάτοπ.
an			of 2D shares	To recognise 3D
Гb	Combine sheres to make new		of 5D shapes.	shapes in different
he	Combine shapes to make new			orientations and
ir F	ones – an arch, a bigger			describe them.
ro	thangle, etc.			
pe				
rtie	Select, rotate and manipulate			
S	shapes in order to develop			
	spatial reasoning skills.			
0			To <i>identify</i> , compare and sort common	
Com	Compose and decompose		2D and 3D shapes and everyday	
upar ify :	shapes so that children can		objects on the basis of their properties	
re ai Sha	recognise a shape can have		and use vocabulary precisely.	
pes	other shapes within it, just as			
	numbers can.			



		Pupils draw lines and shapes using a	To connect decimals
ra		straight edge.	and rounding to
vi			drawing and
pu			measuring straight
2C			lines in centimetres. in
S			a variety of contexts.
3D			a variety or contents.
Sh			To identify horizontal
nab s a			and vertical lines and
nd			pairs of perpendicular
C			and parallel lines.
suc			
stru			To draw 2D shapes
uct			and make 3D shapes
in			using modelling
9			materials.
		To recognise angles as a property of	
		shape or a description of a turn.	
		To laentily right angles, recognise that	
		two right angles make a half-turn, three	
An		make three quarters of a turn and four	
بول		a complete turn	
Sa		To identify whether anales are areater	
		than or lass than a right angle	
		that of less that a right aligie.	



Р	EYFS	KS	1	KS2
osition and D	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
irectio	3 and 4 year olds	Year 1	Year 2	Year 3
ž	Early Learning Goals			
Position, Direction and Moven	Understand position through words alone – for example, "The bag is under the table," – with no pointing. Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.	To describe position, direction and movement, including whole, half, quarter and three- quarter turns <i>in both directions and connect</i> <i>clockwise with the movement on a clock face.</i> To use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside.	To 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).	
ıent	Draw information from a simple map.			



	Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like	To order and arrange combinations of mathematical objects and <i>shapes,</i> <i>including those in different orientations,</i> in patterns and sequences.	
	'pointy', 'spotty', 'blobs', etc.		
	Extend and create ABAB patterns – stick, leaf, stick, leaf.		
σ	Notice and correct an error in		
atter	Continue, copy and create		
ns	repeating patterns.		



	EYFS	EYFS KS1		KS2
Statisti	(3 to 4 years to ELGs)	Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
S	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3
Record, Present and Interpret Data	Experiment with their own symbols and marks, as well as numerals.		To record, interpret, collate, organise and compare information. To interpret and construct simple pictograms, tally charts, block diagrams and simple tables (e.g. many-to-one correspondence in pictograms with simple ratios 2, 5, 10 scales). To ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. To ask and answer questions about totalling and comparing categorical data.	To interpret and present data using bar charts, pictograms and tables <i>and use</i> <i>simple scales with</i> <i>increasing accuracy</i> .
Solve Problems			To solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables.	



Ratio and Pro	EYFS (3 to 4 years to ELGs)	KS1 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance Teacher Assessment Framework		KS2 Statutory Curriculum Guidance Non-Statutory Curriculum Guidance
portion	3 and 4 year olds Reception Early Learning Goals	Year 1	Year 2	Year 3

