Progression Map





Essential Knowledge for a mathematician

- Have a well-developed sense of the size of a number and where it fits into the number system (place value).
- Know by heart number facts such as number bonds, multiplication tables, doubles and halves.
- Appropriate and accurate mathematical vocabulary.

Essential Skills for a mathematician

- Calculate accurately and efficiently both mentally and in writing, drawing on a range of calculation strategies.
- Explain your methods and reasoning, using correct mathematical terms.
- Demonstrate a resilience in trying out a range of strategies (including using appropriate manipulatives to solve problems.

Convect Attempt Explain Apply	EYFS FS1	EYFS FS2	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place value:	- recite	- count	- count to and	- count in steps	- count from 0 in	- count in	- count forwards	- use negative
Place value: counting	- recite numbers past 5 - say one number name for each item in order: 1, 2, 3, 4, 5 - know that the last number reached when counting a small set of objects tells you how many there are in total	- count objects, actions and sounds - count beyond ten - verbally count beyond 20, recognising the pattern of the counting system	- 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	- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	- 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* *This can be discussed in Y4 but is taught explicitly in Y5	- count forwards or backwards in steps of powers of 10 for any given number up to 1000000 - 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
Place value:	('cardinal principle')	- subitise	- identify and	- read and write	- identify,	- identify,	- read, write,	- read, write,
representing number	recognition of up to 3	- link the number	represent numbers using	numbers to at least 100 in	represent and estimate	represent and estimate	(order and compare)	(order and compare)





	abiasts	sumbol	abjects and	numarals and in	numbore usir =	numbers usin =	numbers to at	numbers up to 10
	objects,	symbol	objects and	numerals and in	numbers using	numbers using	numbers to at	numbers up to 10
	without	(numeral)	pictorial	words	different 	different	least 1 000 000	000 000 and
	having to	with its	representations	- identify,	representations	representations	and determine	determine the
	count them	cardinal	- read and write	represent and	- read and write	- read Roman	the value of each	value of each
	individually	number value	numbers to 100	estimate	numbers up to	numerals to 100	digit	digit
	('subitising')		in numerals	numbers using	1000 in	(I to C) and	- read Roman	
	- show 'finger		- read and write	different	numerals and in	know that over	numerals to 1000	
	numbers' up		numbers from 1	representations,	words	time, the	(M) and	
	to 5		to 20 in	including the		numeral system	recognise years	
	- link		numerals and	number line		changed to	written in Roman	
	numerals and		words			include the	numerals	
	amounts e.g.					concept of zero		
	showing the					and place value		
	right number							
	of objects to							
	match the							
	numeral, up							
	to 5							
	- experiment							
	with their							
	own symbols							
	and marks as							
	well as							
	numerals							
Place value: use	- compare	- compare	- given a	- recognise the	- recognise the	- find 1000 more	- (read, write)	- (read, write),
and compare	quantities	numbers	number,	place value of	place value of	or less than a	order and	order and
_	using	- compare	identify one	each digit in a	each digit in a	given number	compare	compare
	language:	quantities up	more and one	two-digit	three-digit	- recognise the	numbers to at	numbers up to
	'more than',	to 10 in	less	number (tens,	number	place value of	least 1 000 000	10 000 000 and
	1	1	1 :	(20.13)			12230 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	== 300 000 00





'fewer than'	different	ones)	(hundreds, tens,	each digit in a	and determine	determine the
	contexts,	- compare and	ones)	four-digit	the value of each	value of each
	recognising	order numbers	- compare and	number	digit	digit
	when one	from 0 up to	order numbers	(thousands,		
	quantity is	100; use and =	up to 1000	hundreds, tens,		
	greater than,	signs		and ones)		
	less than or			- order and		
	the same as			compare		
	the other			numbers		
	quantity			beyond 1000		
	- understand					
	the 'one more					
	than/one less					
	than'					
	relationship					
	between					
	consecutive					
	numbers					
	- explore the					
	composition					
	of numbers to					
	10					
	- have a deep					
	understanding					
	of numbers to					
	10, including					
	the					
	composition					
	of each					
	number					





Place value:	- solve real			- use place value	- solve number	- round any	- round any	- round any
problems /	world			and number	problems and	number to the	number up to	whole number to
rounding	mathematical			facts to solve	practical	nearest 10, 100	1 000 000 to the	a required
	problems			problems	problems	or 1000	nearest 10, 100,	degree of
	with numbers				involving these	- solve number	1000, 10 000 and	accuracy
	up to 5				ideas	and practical	100 000	- solve number
						problems that	- solve number	and practical
						involve all of the	problems and	problems that
						above and with	practical	involve all of the
						increasingly	problems that	above
						large positive	involve all of the	
						numbers	above	
Addition and		- recall	- add and	- add and	- add and	- add and	- add and	- perform mental
subtraction:		automatically	subtract one-	subtract	subtract	subtract	subtract whole	calculations,
calculations		number	digit and two-	numbers using	numbers	numbers with	numbers with	including with
		bonds for	digit numbers	concrete	mentally,	up to 4 digits	more than 4	mixed operations
		numbers 0-10	to 20, including	objects, pictorial	including:	using the formal	digits, including	and large
		- recall	zero	representations,	a) a three-digit	written methods	using formal	numbers
		automatically		and mentally,	number and	of columnar	written methods	- use their
		(without		including:	ones	addition and	(column addition	knowledge of the
		reference to		a) a two-digit	b) a three-digit	subtraction	and subtraction)	order of
		rhymes,		number and	number and	where	- add and	operations to
		counting or		ones	tens	appropriate	subtract numbers	carry out
		other aids)		b) a two-digit	c) a three-digit		mentally with	calculations
		number		number and	number and		increasingly large	involving the four
		bonds up to 5		tens	hundreds		numbers	operations
		(including		c) two two-digit	- add and			
		subtraction		numbers	subtract			
		facts) and		d) adding three	numbers with			
		some number		one-digit	up to three			





						T	T
	bonds to 10,		numbers	digits, using			
	including			formal written			
	double facts			methods of			
				columnar			
				addition and			
				subtraction			
Addition and	- explore and	- solve one-step	- solve problems	- solve	- solve addition	- solve addition	- solve addition
subtraction:	represent	problems that	with addition	problems,	and subtraction	and subtraction	and subtraction
problems	patterns	involve addition	and subtraction:	including	two-step	multi-step	multi-step
	within	and subtraction,	a) using	missing number	problems in	problems in	problems in
	numbers up	using concrete	concrete objects	problems, using	contexts,	contexts,	contexts,
	to 10,	objects and	and pictorial	number facts,	deciding which	deciding which	deciding which
	including	pictorial	representations,	place value, and	operations and	operations and	operations and
	evens and	representations,	including those	more complex	methods to use	methods to use	methods to use
	odds, double	and missing	involving	addition and	and why	and why	and why
	facts and how	number	numbers,	subtraction		- solve problems	
	quantities can	problems such	quantities and			involving	
	be distributed	as 7 = ? – 9	measures			addition,	
	evenly		b) applying their			subtraction,	
			increasing			multiplication	
			knowledge of			and division and	
			mental and			a combination of	
			written			these, including	
			methods			understanding	
						the meaning of	
						the equals sign	
Multiplication			- recall and use	- recall and use	- recall	- identify	- identify
and division:			multiplication	multiplication	multiplication	multiples and	common factors,
recall / use			and division	and division	and division	factors, including	common
			facts for the 2, 5	facts for the 3, 4	facts for	finding all factor	multiples and





	and 10	and 8	multiplication	pairs of s	nrimo numboro
			multiplication	pairs of a	prime numbers
	multiplication	multiplication	tables up to 12 ×	number, and	- use estimation
	tables, including	tables	12	common factors	to check answers
	recognising odd		- use place	of two numbers	to calculations
	and even		value, known	- know and use	and determine, in
	numbers		and derived	the vocabulary of	the context of a
	- show that		facts to multiply	prime numbers,	problem, an
	multiplication of		and divide	prime factors and	appropriate
	two numbers		mentally,	composite (non-	degree of
	can be done in		including:	prime) numbers	accuracy
	any order		multiplying by 0	- establish	
	(commutative)		and 1, dividing	whether a	
	and division of		by 1, multiplying	number up to	
	one number by		together three	100 is prime and	
	another cannot		numbers	recall prime	
			- recognise and	numbers up to 19	
			use factor pairs	- recognise and	
			and	use square	
			commutativity	numbers and	
			in mental	cube numbers,	
			calculations	and the notation	
				for squared and	
				cubed	
Multiplication	- calculate	- write and	- multiply two-	- multiply	- multiply multi-
and division:	mathematical	calculate	digit and three-	numbers up to 4	digit numbers up
calculations	statements for	mathematical	digit numbers	digits by a one or	to 4 digits by a
	multiplication	statements for	by a one-digit	two-digit number	two-digit whole
	and division	multiplication	number using	using a formal	number using the
	within the	and division	formal written	written method,	formal written
				•	
	multiplication	using the	layout	including long	method of long





tables and write	multiplication	multiplication for	multiplication
them using the	tables that they	two-digit	- divide numbers
multiplication	know, including	numbers	up to 4 digits by a
(×), division (÷)	for two-digit	- multiply and	two-digit whole
and equals (=)	numbers times	divide numbers	number using the
signs	one-digit	mentally drawing	formal written
	numbers, using	upon known facts	method of long
	mental and	- divide numbers	division, and
	progressing to	up to 4 digits by a	interpret
	formal written	one-digit number	remainders as
	methods	using the formal	whole number
		written method	remainders,
		of short division	fractions, or by
		and interpret	rounding, as
		remainders	appropriate for
		appropriately for	the context
		the context	- divide numbers
		- multiply and	up to 4 digits by a
		divide whole	two-digit number
		numbers and	using the formal
		those involving	written method
		decimals by 10,	of short division
		100 and 1000	where
			appropriate,
			interpreting
			remainders
			according to the
			context
			- perform mental
			calculations,
			including with





						mixed operations and large numbers
Multiplication and division: problems	- 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 multiplication and division, including scaling by simple fractions and problems involving simple rates - solve problems involving addition, subtraction, multiplication and division and a combination of	- solve problems involving addition, subtraction, multiplication and division - use their knowledge of the order of operations to carry out calculations involving the four operations





					these, including understanding the meaning of the equals sign	
Fractions: recognise and write	- 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	- recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 - recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators - recognise and use fractions as numbers: unit fractions and non-unit fractions and non-unit fractions and non-unit fractions and non-unit fractions with	- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	- 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 > 1 as a mixed number e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1$ $\frac{1}{5}$ of	





		small denominators			
Fractions: compare	- Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	- recognise and show, using diagrams, equivalent fractions with small denominators - compare and order unit fractions, and fractions with the same denominators	- recognise and show, using diagrams, families of common equivalent fractions	- compare and order fractions whose denominators are all multiples of the same number	- use common factors to simplify fractions; use common multiples to express fractions in the same denomination - compare and order fractions, including fractions > 1
Fractions: calculations	- write simple fractions e.g. $\frac{1}{2}$ of 6 = 3	- add and subtract fractions with the same denominator within one whole e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$	- add and subtract fractions with the same denominator	- 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	- 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





				materials and diagrams	e.g. $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ - divide proper fractions by whole numbers e.g. $\frac{1}{3} \div 2 = \frac{1}{6}$
Fractions: solve problems		- 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		
Decimals: recognise, write, compare			- recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to	- read and write decimal numbers as fractions e.g. $0.71 = \frac{71}{100}$ - recognise and use thousandths and relate them to tenths, hundredths and	- identify the value of each digit in numbers given to three decimal places





		1	1 1 3	docimal	
			- round decimals with one decimal place to the nearest whole number - compare numbers with the same number of decimal places up to two decimal places	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	
Fractions, decimals and percentages			- solve simple measure and money problems involving fractions and decimals to two 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	- associate a fraction with division and calculate decimal fraction equivalents e.g. $0.375 = \frac{3}{8}$ - recall and use equivalences between simple fractions, decimals and percentages, including in different





			which require	contexts
			knowing	
			percentage and	
			decimal	
			equivalents of $\frac{1}{2}$,	
			1 1 2 4	
			$\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions	
			with a	
			denominator of a	
			multiple of 10 or	
			25	
Ratio and				- solve problems
proportion				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/use
				of percentages
				for comparison
				- solve problems
				involving similar
				shapes where the
				scale factor is





				known or can be
				found
				- solve problems
				involving unequal
				sharing and
				grouping using
				knowledge of
				fractions and
				multiples
Algebra	- solve one-step	- recognise and	- solve	 - use simple
	problems that	use the inverse	problems,	formulae
	involve addition	relationship	including	- generate and
	and subtraction,	between	missing number	describe linear
	using concrete	addition and	problems	number
	objects and	subtraction and	*Note –	sequences
	pictorial	use this to check	although formal	 express missing
	representations,	calculations and	algebraic	number
	and missing	solve missing	notation is not	problems
	number	number	introduced until	algebraically
	problems such	problems	Y6, algebraic	- find pairs of
	as 7 = ? - 9	*Note –	thinking starts	numbers that
	*Note –	although formal	much earlier as	satisfy an
	although formal	algebraic	exemplified by	equation with
	algebraic	notation is not	the 'missing	two unknowns
	notation is not	introduced until	number'	- enumerate
	introduced until	Y6, algebraic	objectives from	possibilities of
	Y6, algebraic	thinking starts	Y1/2/3	combinations of
	thinking starts	much earlier as		two variables
	much earlier as	exemplified by		
	exemplified by	the 'missing		





			T	1	T	T	1	1
			the 'missing	number'				
			number'	objectives from				
			objectives from	Y1/2/3				
			Y1/2/3					
Measurement:	All strands	All strands	- compare,	- choose and	- measure,	- convert	- convert	- solve problems
using measures	- make	- compare	describe and	use appropriate	compare, add	between	between	involving the
	comparisons	length, weight	solve practical	standard units	and subtract:	different units	different units of	calculation and
	between	and capacity	problems for:	to estimate and	lengths	of measure [for	metric measure	conversion of
	objects		a) lengths and	measure	(m/cm/mm);	example,	- understand and	units of measure,
	relating to		heights	length/height in	mass (kg/g);	kilometre to	use approximate	using decimal
	size, length,		b) mass/weight	any direction	volume/capacity	metre; hour to	equivalences	notation up to 3
	weight and		c) capacity and	(m/cm); mass	(l/ml)	minute]	between metric	d.p. where
	capacity		volume	(kg/g);		- estimate,	units and	appropriate
			d) time	temperature		compare and	common imperial	- use, read, write
			- measure and	(°C); capacity		calculate	units such as	and convert
			begin to record	(litres/ml) to the		different	inches, pounds	between
			the following:	nearest		measures	and pints	standard units,
			a) lengths and	appropriate			- use all four	converting
			heights	unit, using			operations to	measurements of
			b) mass/weight	rulers, scales,			solve problems	length, mass,
			c) capacity and	thermometers			involving	volume and time
			volume	and measuring			measure [e.g.	from a smaller
			d) time (hours,	vessels			length, mass,	unit of measure
			minutes,	- compare and			volume, money]	to a larger unit,
			seconds)	order lengths,			using decimal	and vice versa,
				mass,			notation,	using decimal
				volume/capacity			including scaling	notation to up to
				and record the				3 d.p.
				results using >,				- convert
				< and =				between miles





						and kilometres
Money	- recognise and know the value of different denominations of coins and notes	- 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	- add and subtract amounts of money to give change, using both £ and p in practical contexts	- estimate, compare and calculate different measures, including money in pounds and pence	use all four operations to solve problems involving measure e.g. money	
		change				





Time	- begin to	- sequence	- compare and	- tell and write	- read, write and	- solve problems	- use, read, write
	describe a	events in	sequence	the time from	convert time	involving	and convert
	sequence of	chronological	intervals of time	an analogue	between	converting	between
	events, real	order using	- tell and write	clock, including	analogue and	between units of	standard units,
	or fictional,	language e.g.	the time to five	using Roman	digital 12- and	time	converting
	using words,	before and	minutes,	numerals from I	24-hour clocks		measurements of
	such as 'first',	after, next, first,	including	to XII, and 12-	- solve problems		time from a
	'then'	today,	quarter past/to	hour and 24-	involving		smaller unit of
		yesterday,	the hour and	hour clocks	converting from		measure to a
		tomorrow,	draw the hands	- estimate and	hours to		larger unit, and
		morning,	on a clock face	read time with	minutes;		vice versa
		afternoon and	to show these	increasing	minutes to		*Note – time
		evening]	times	accuracy to the	seconds; years		conversions are
		- recognise and	- know the	nearest minute;	to months;		covered in Y5;
		use language	number of	record and	weeks to days		the Y6 block
		relating to	minutes in an	compare time in			concentrates on
		dates, including	hour and the	terms of			metric units.
		days of the	number of	seconds,			
		week, weeks,	hours in a day	minutes and			
		months and		hours; use			
		years		vocabulary such			
		- tell the time to		as o'clock,			
		the hour and		a.m./p.m.,			
		half past the		morning,			
		hour and draw		afternoon, noon			
		the hands on a		and midnight			
		clock face to		- know the			
		show these		number of			
		times		seconds in a			
				minute and the			
				number of days			





			in each month,			
			year and leap			
			year			
			- compare			
			durations of			
			events [for			
			example to			
			calculate the			
			time taken by			
			particular			
			events or tasks]			
Perimeter, area			- measure the	- measure and	- measure and	- recognise that
and volume			perimeter of	calculate the	calculate the	shapes with the
			simple 2D	perimeter of a	perimeter of	same areas can
			shapes	rectilinear figure	composite	have different
				(including	rectilinear shapes	perimeters and
				squares) in	in centimetres	vice versa
				centimetres and	and metres	- recognise when
				metres	- calculate and	it is possible to
				- find the area of	compare the area	use formulae for
				rectilinear	of rectangles	area and volume
				shapes by	(including	of shapes
				counting	squares) and	- calculate the
				squares	including using	area of
					standard units,	parallelograms
					square	and triangles
					centimetres	- calculate,
					(cm2) and square	estimate and
					metres (m2) and	compare volume
					estimate the area	of cubes and





							of irregular shapes - estimate volume [e.g. using blocks to build cuboids] and capacity [for	cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to
							example, using	other units
C 4 2D	1.11.15.1			: d 1'f d	1 20		water]	d. 20 d
Geometry: 2D	- talk about	- select, rotate	- recognise and	- identify and	- draw 2D	- compare and	- distinguish	- draw 2D shapes
shapes	and explore 2D and 3D	and	name common	describe the	shapes	classify	between regular	using given
		manipulate	2D shapes [for	properties of 2D		geometric	and irregular	dimensions and
	shapes (for example,	shapes in order to	example, rectangles	shapes, including the		shapes, including	polygons based on reasoning	angles - compare and
	circles,	develop	(including	number of sides		quadrilaterals	about equal sides	classify
	rectangles,	spatial	squares), circles	and line		and triangles,	and angles	geometric shapes
	triangles and	reasoning	and triangles]	symmetry in a		based on their	- use the	based on their
	cuboids)	skills	and thangles	vertical line		properties and	properties of	properties and
	using informal	- compose		- identify 2D		sizes	rectangles to	sizes
	and	and		shapes on the		- identify lines of	deduce related	- illustrate and
	mathematical	decompose		surface of 3-D		symmetry in 2D	facts and find	name parts of
	language:	shapes so that		shapes, [for		shapes	missing lengths	circles, including
	'sides',	children can		example, a		presented in	and angles	radius, diameter
	'corners',	recognise a		circle on a		different		and
	'straight',	shape can		cylinder and a		orientations		circumference
	'flat', 'round'.	have other		triangle on a				and know that
	- select	shapes within		pyramid]				the diameter is
	shapes	it, just as		- compare and				twice the radius
	appropriately:	numbers can		sort common				
	flat surfaces			2D shapes and				





	C 1 1111		1				1
	for a building,		everyday				
	a triangular		objects				
	pattern for a						
	roof, etc						
	- combine						
	shapes to						
	make new						
	ones (an arch,						
	a bigger						
	triangle, etc.)						
Geometry: 3D		- recognise and	- recognise and	- make 3D		- identify 3D	- recognise,
shapes		name common	name common	shapes using		shapes, including	describe and
		3D shapes [for	3D shapes [for	modelling		cubes and other	build simple 3D
		example,	example,	materials;		cuboids, from 2D	shapes, including
		cuboids	cuboids	recognise 3D		representations	making nets
		(including	(including	shapes in			_
		cubes),	cubes),	different			
		pyramids and	pyramids and	orientations and			
		spheres]	spheres]	describe them			
			- compare and				
			sort common				
			3D shapes and				
			everyday				
			objects				
Geometry: angles			<u> </u>	- recognise	- identify acute	- know angles are	- find unknown
and lines				angles as a	and obtuse	measured in	angles in any
				property of	angles and	degrees:	triangles,
				shape or a	compare and	estimate and	quadrilaterals,
				description of a	order angles up	compare acute,	and regular
				turn	to two right	obtuse and reflex	polygons





					- 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	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	angles - draw given angles, and measure them in degrees - identify: a) angles at a point and one whole turn (total 360°) b) angles at a point on a straight line and ½ a turn (total 180°) c) other multiples of 90°	- recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
Position and	- understand	- draw	- describe	- order and		- describe	- identify,	- describe
direction	position	information	position,	arrange		positions on a	describe and	positions on the full coordinate
	through words alone	from a simple	direction and	combinations of mathematical		2D grid as coordinates in	represent the	
		map	movement,			the first	position of a	grid (all four
	e.g. "The bag		including whole,	objects in			shape following a reflection or	quadrants)
	is under the		half, quarter	patterns and		quadrant		- draw and
	table," (with		and three-	sequences		- describe	translation, using	translate simple
	no pointing)		quarter turns	- use		movements	the appropriate	shapes on the





	- describe a		mathematical		between	language, and	coordinate plane,
	familiar route		vocabulary to		positions as	know that the	and reflect them
	- discuss		describe		translations of a	shape has not	in the axes
	routes and		position,		given unit to the	changed	
	locations,		direction and		left/right and		
	using words		movement,		up/down		
	like 'in front		including		- plot specified		
	of' and		movement in a		points and draw		
	'behind'		straight line and		sides to		
			distinguishing		complete a		
			between		given polygon		
			rotation as a				
			turn and in				
			terms of right				
			angles for				
			quarter, half				
			and three-				
			quarter turns				
			(clockwise and				
			anti-clockwise)				
Statistics: present	- talk about	- continue,	- interpret and	- interpret and	- interpret and	- complete, read	- interpret and
and interpret data	and identify	copy and	construct simple	present data	present discrete	and interpret	construct pie
	the patterns	create	pictograms, tally	using bar charts,	and continuous	information in	charts and line
	around them	repeating	charts, block	pictograms and	data using	tables, including	graphs and use
	e.g. stripes on	patterns	diagrams and	tables	appropriate	timetables	these to solve
	clothes,		simple tables		graphical		problems
	designs on				methods,		
	rugs and				including bar		
	wallpaper.				charts and time		
	Use informal				graphs		





	language like					
	'pointy',					
	'spotty',					
	'blobs', etc.					
	- extend and					
	create ABAB					
	patterns e.g.					
	stick, leaf,					
	stick, leaf					
	- notice and					
	correct an					
	error in a					
	repeating					
	pattern					
	- experiment					
	with their					
	own symbols					
	and marks, as					
	well as					
	numerals					
Statistics: solve		- ask and	- solve one-step	- solve	- solve	- calculate and
statistical		answer simple	and two-step	comparison,	comparison, sum	interpret the
problems		questions by	questions [for	sum and	and difference	mean as an
		counting the	example, 'How	difference	problems using	average
		number of	many more?'	problems using	information	
		objects in each	and 'How many	information	presented in a	
		category and	fewer?'] using	presented in bar	line graph	
		sorting the	information	charts,		
		categories by	presented in	pictograms,		
		quantity	scaled bar	tables and other		





	- ask and	charts and	graphs	
	answer	pictograms and		
	questions about	tables		
	totalling and			
	comparing			
	categorical data			