	EYFS	Year 1	Year 1/2	Year 2	Year 3	Year 4	Year 5	Year 6
Number and Place	Early Learning	count to and	count to and	count in steps of	count from 0 in	count in multiples	read, write, order	read, write, order
Value	<u>Goals</u>	across 100,	across 100,	2, 3, and 5 from 0,	multiples of 4, 8,	of 6, 7, 9, 25 and	and compare	and compare
	Have a deep	forwards and	forwards and	and in tens from	50 and 100; find	1000	numbers to at	numbers up to 10
	understanding of	backwards,	backwards,	any number,	10 or 100 more or		least 1 000 000	000 000 and
	number to 10,	beginning with 0	beginning with 0	forward and	less than a given	find 1000 more or	and determine	determine the value
	including the	or 1, or from any	or 1, or from any	backward	number	less than a given	the value of each	of each digit
	composition of	given number	given number			number	digit	
	each number			recognise the	recognise the			round any whole
	Subitise	count, read and	count, read and	place value of	place value of	count backwards	count forwards or	number to a
		write numbers to	write numbers to	each digit in a	each digit in a	through zero to	backwards in	required degree of
	(recognise quantities	100 in numerals;	100 in numerals;	two-digit number	three-digit	include negative	steps of powers of	accuracy
	without	count in multiples	count in multiples	(tens, ones)	number	numbers	10 for any given	
	counting) up to 5	of twos, fives and	of twos, fives and		(hundreds, tens,		number up to 1	use negative
	counting) up to 5	tens	tens	identify,	ones)	recognise the	000 000	numbers in context,
	Automatically			represent and		place value of		and calculate
	recall (without	given a number,	given a number,	estimate numbers	compare and	each digit in a	interpret negative	intervals across zero
	reference to	identify one more	identify one more	using different	order numbers up	four-digit number	numbers in	
	rhymes, counting	and one less	and one less	representations,	to 1000	(thousands,	context, count	solve number and
	or other aids)			including		hundreds, tens,	forwards and	practical problems
	number bonds	identify and	identify and	the number line	identify,	and ones)	backwards with	that involve all of
	up to 5	represent	represent		represent and		positive and	the above.
	(including	numbers using	numbers using		estimate numbers	order and	negative whole	
	subtraction	objects and	objects and	compare and	using different	compare numbers	numbers,	
	facts) and some	pictorial	pictorial	order numbers	representations	beyond 1000	including through	
	number bonds to	representations	representations	from 0 up to 100;			zero	
	10, including	including the	including the	use <, > and =	read and write	identify,		
	double facts.	number line, and	number line, and	signs	numbers up to	represent and	round any	
	** 1 11	use the language	use the language		1000 in numerals	estimate numbers	number up to 1	
	Verbally count beyond 20.	of: equal to, more	of: equal to, more	read and write	and in words	using different	000 000 to the	
	recognising the	than, less than	than, less than	numbers to at		representations	nearest 10, 100,	
	pattern of the	(fewer), most,	(fewer), most,	least 100 in	solve number		1000, 10 000 and	
	counting system	least	least	numerals and in	problems and	round any	100 000	
	counting system			words	practical	number to the		
	Compare	read and write	read and write		problems	nearest 10, 100 or	solve number	
	quantities up to	numbers from 1	numbers from 1	use place value	involving these	1000	problems and	
	10 in different	to 20 in numerals	to 20 in numerals	and number facts	ideas.		practical	
	contexts,	and words.	and words.	to solve problems.		solve number and	problems that	
	recognising					practical	involve all of the	
	when one		and the strength of			problems that	above	
	quantity is		count in steps of			involve all of the		
	greater than, less		2, 3, and 5 from 0,			above and with		

	than or the same	and in tens from	to an advantage of the second	read Roman
			increasingly large	
	as the other	any number,	positive numbers	numerals to 1000
	quantity;	forward and		(M) and recognise
		backward	read Roman	years written in
	Explore and		numerals to 100 (I	Roman numerals.
	represent	recognise the	to C) and know	
	patterns within	place value of	that over time,	
	numbers up to	each digit in a	the numeral	
	10, including	two-digit number	system changed	
	evens and odds,	(tens, ones)	to include the	
	double facts and		concept of zero	
	how quantities	identify,	and place value.	
	can be	represent and		
	distributed	estimate numbers		
	equally.	using different		
		representations,		
	Development	including		
	Matters			
		the number line		
	Count objects,			
	actions and			
	sounds.	compare and		
		order numbers		
	Subitise.	from 0 up to 100;		
	Subruse.	use <, > and =		
	Link the number	signs		
	symbol (numeral)	Ť		
	with its cardinal	read and write		
	number value.	numbers to at		
	number value.	least 100 in		
		numerals and in		
	Count beyond	words		
	ten.	wurus		
	Compare	use place value		
	numbers.	and number facts		
		to solve		
	Understand the	problems.		
	'one more			
	than/one less			
	than' relationship			
	between			
۱			L .	۱

Addition and	consecutive numbers. Explore the composition of numbers to 10. Classroom Activities Numicon Number fans Number lines Number lines Number tracks Blank numberlines /tracks Number squares Number challenges Dominoes Numeral representations in all areas of provision Cardinal numbers <u>Vocabulary</u> Number, count, how many? One more. One less, same, different	read, write and	read, write and	solve problems	add and subtract	add and subtract	add and subtract	solve addition and
Addition and Subtraction	<u>Early Learning</u> <u>Goals</u> Have a deep understanding of number to 10, including the composition of each number	read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	solve problems with addition and subtraction:using concrete objects and pictorial representations, including those involving numbers,	add and subtract numbers mentally, including: -a three-digit number and ones - a three-digit number and tens	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)	solve addition and subtraction multi- step problems in contexts, deciding which operations and methods to use and why

Automatically recall (within 20 or there aids) number tooks and related subtraction facts up to 5 (including subtraction (including subtraction facts) and subtraction number boads to 10. including erecall and subtraction including zero and missing quantities to po including zero including zero and missing quantities to po including zero subtraction and missing quantities to po including zero including zero and missing recognising when one ast to add and subtract metal and subtraction tool including zero and missing quantities to po including zeronumber to add and subtract and missing and and subtract metal and written methods of columents addition and subtraction tool subtraction and subtraction and subt			represent and use	represent and use	quantities and	- a three-digit			solve problems
reference reference or other dist number bands up to 5 finduding subtraction finduding zero mumber bands tup to 5 finduding zero mumber bands tup to 5 finduding zero mumbers to 20, mumbers to 20, numbers to 20, number radial noticid green number radial number radial numbers, numbers, numbers, number radial numbers, numbe		Automatically				0	actimate and use	add and subtract	•
reference to rhymes, counting or other aids)subtraction facts within 20subtraction facts within 20subtraction facts within 20add and subtract mcreasing knowledge of two-digitadd and subtract mereal and written methods subtraction facts mereal and written methods subtraction and subtraction factsadd and subtract mereal and written methods subtraction facts mereal and wro-digitadd and subtract mereal and written methods subtraction facts mereal and wro-digitadd and subtract mereal and wro-digitadd and subtract mereal and written methods subtraction facts subtraction facts subtraction facts subtraction subtraction and subtraction, and missing number problems, including these subtraction subtraction, and methods to subtraction and subtraction subtraction, and methods to and methods to use inverse subtraction subtraction, and methods to use inverse subtraction su					medsures				
Image: space of the space of		S			applying their	nunureus			
or other aids) number bonds up to 5 (including subtraction mumbers to 20, including zeroadd and subtract one-digit and two-digit including zeronumbers to 20, including zeronumbers to 20, including zeronumbers to 20, including zeronumbers to 20, including zerorecall and use addition and subtraction two-digit authers to 20, including zeroa calculation using context, deciding authers using context, deciding writen methodsa calculation solve addition and subtraction two- addition and subtraction using context, deciding voltich and methods to using context problems that involve addition and subtraction, using context opictorial representations, representation, including revolu						add and subtract		07	
Image: probes to probes<			WILLIIII 20	WILIIII 20	<u> </u>			large number	UNSION
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Including subtraction facts) and some number bonds to 							colvo addition and		
Subtraction facts) and some number boids to 10, including zerorow digit numbers to 20, including zerorecall and use addition and subtraction tacts and addition and subtraction factssource factor words to 20 fluently, and addition and subtraction tacts and methods to and methods to and methods to to 20 fluently, and solve one-step problems that determine, inthe context of a problems, that determine, inthe context of a problem, and subtraction, using context of a problems, including representations, and missing representations, and missing representations, and missing representations, and method subtraction and subtraction and subtraction and subtraction and subtraction and subtraction and use and why.context of a context, deciding which operations and methods to and meth		A Contraction of the second se			written methods	•			
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number bonds tonumber bonds tonumber bonds tonumber bonds toproblem, andporblem, andproblem, andporblem, andpo								· · · · · ·	· · · · · · · · · · · · · · · · · · ·
10. including double facts.solve one-step problems that invoke addition and subtraction, using concrete objects and pictorial rerosalting mumber problems swhen one quantity is greater than, less than or the same as the other quantity;solve one-step problems that invoke addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = -9.to 20 fluently, and derive and use related facts up to 100and methods to use and why.and methods to use and why.	r	number bonds to	including zero	including zero					
double facts.problems that involve addition and subtraction, using concrete objects and prictorial representations, and missing quantity is than or the same as the other quantity;problems that involve addition and subtraction, using concrete objects and prictorial representations, and missing such as 7 = -9.problems that involve addition add and subtract number problems including: representations, and missing representations, and missing representations, including: - a two-digit number and tens - a two-digit number and tens - atwo-digit number and tens - atwo-digit number and tens - atwo-digit number and tens - atwo-digit number and tens - addition and subtraction.estimate the representations, and missing numbers using numbers using numbers using numbers and tens - atwo-digit numbers and tens - adding three one-digit numbers - adding three one-digit numbers - adding three - adding three - adding three - addition of two numbers can be distributed equally.problems that increasing show that addition of two numbers can be done in ny order knowledge ofestimate the related facus up to addition and subtraction.solve addition and subraction and use and why.of accuracy.DevelopmentExplore and equally.problems thre	1	10, including	anti-anna atau	anti-range atom		subtraction		· · · · · · · · · · · · · · · · · · ·	
Compare quantifies up to 10 in different contexts, recognising quantify is greater than, less than or the same as the other quantify;involve addition and subtraction, using concrete objects and pictorialrelated facts up to 10 100answer to a calculation and use inverse operations to contexts, econgnising mumber problems such as 7 = -9.solve addition and subtraction, under subtraction, and missing such as 7 = -9.solve addition and subtract pictorial concrete objects, and missing such as 7 = -9.and and subtract pictorial concrete objects and missing such as 7 = -9.and missing pictorial concrete objects and methods to subtractionsuing - a two-digit number and pictorial representations, including; - a two-digit number and pictorial representations, including three one-digit numbers - adding three one-digit numbers - adding three one-digit numbers - adding three one-digit numbers - adding three one-digit numbersanswer to a calculation and subtractionsuing - a two-digit number and pictorial - adding three one-digit numbersanswer to a calculation and subtractionsuing - a two-digit number and pictorial - adding three one-digit numbersanswer to a calculation and subtraction.solve addition and subtraction solve problems in number and pictorial - adding three one-digit numbersanswer to a calculation and subtraction.solve addition and subtraction number and subtractionDevelopmentIncluding evens and odds, can be distributed equally.Including three noreasing knowledge ofaddition of two numbers can be dome	C	double facts.				and a state that		accuracy	
Compare quantities up to 10 in different contexts, when one quantity is greater than, less than or the same as the other quantity;and subtraction, using concrete objects and pictorial representations, and missing number problems100calculation and use inverse operations to check answerssubtraction multi- step problems in and missing number problemsExplore and represent quantity;representations, and missing number problemsadd and subtract pictorial representations, such as 7 = -9.add and subtract number problems such as 7 = -9.solve problems, and mentally, including: - a two-digit number and tens - adding three including three including these including these including their including their increasing to the in any order to the in any order to the in any order100calculation and use inverse addition of two numbers, can be done in any order to en any ordersubtraction, and methods to encemplex addition of two numbers, can be done in any ordersubtraction, and methods to encemplex addition of two numbers, can be done in any ordersubtraction, and and							use and wny.	and the analytic and the	or accuracy.
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concreteconcret	1	10 in different							
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Number problems greater than, less than or the same as the other quantity;number problems such as 7 = -9.number problems such as 7 = -9.including mentally, including: - a two-digit number and ones - a two-digit number and ones - a two-digit number and ones - a two-digit number and tens addition and subtraction:using - a two-digit number and tens - atwo-digit number and tens - atwo-digit - adding three - adding three <br< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></br<>									
greater than, less than or the same as the other quantity;such as 7 = - 9.such as 7 = - 9.and mentally, including: - a two-digitnumber problems, using number facts, place value, andExplore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.such as 7 = - 9.and mentally, including: - a two-digit number and ones - a two-digit number and tens - a two-digit numbers - two two-digit numbersnumber more complex addition and subtraction.0, including evens and odds, double facts and how quantities can be distributed equally.such as 7 = - 9.and mentally, including threi numbers one-digit numbersnumber more complex addition and subtraction.Developmentbsuch as 7 = - 9.such as 7 = - 9.and mentally, including: - a two-digit numbers onc-digit numbers one-digit numbersnumber more complex addition and subtraction.			U U	U U U				use and why.	
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quantity;with addition and subtraction:using concrete objects and pictorial represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.with addition and subtraction:using and pictorial representations, including those quantities and measuresplace value, and more complex addition and subtraction.Developmentwith addition and subtractionnumber and ones - at wo-digit numbers - adding three one-digit numbers - adding three one-digit numbersplace value, and more complex addition and subtraction.Developmentwith addition and subtractionapplying their increasing knowledge ofnumber and ones - at wo-digit numbers - adding three one-digit numbers - adding three one-digit numbersplace value, and more complex addition and subtraction.Developmentwith addition and increasing knowledge ofnumber and ones - at wo-digit numbers - adding three one-digit numbers addition of two numbers can be done in any order (commutative)place value, and more complex addition and subtraction.					U				
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Matters mental and and subtraction of				mental and	and subtraction of				
written methods one number from				written methods	one number from				
another cannot					another cannot				

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	Understand the	recall and use				
	'one more	addition and	recognise and use			
	than/one less	subtraction facts	the inverse			
	than'	to 20 fluently, and	relationship			
	relationship	derive and use	between addition			
	between	related facts up to	and subtraction			
	consecutive	100	and use this to			
	numbers.		check calculations			
		add and subtract	and solve missing			
	Automatically	numbers using	number			
	recall number	concrete objects,	problems.			
	bonds for	pictorial				
	numbers 0–5 and	representations,				
	some to 10.	and mentally,				
		including:				
		- a two-digit				
	Classroom	number and ones				
	Activities	-a two-digit				
	Counting Bears,	number and tens				
	Beads	-two two-digit				
	Sorting hoops	numbers				
	Numberlines	-adding three				
	Number tracks	one-digit numbers				
	Natural materials,	one-uigit numbers				
	Maths Kitchen					
	outside					
	Pegs/ washing	show that				
	lines	addition of two				
		numbers can be				
		done in any order				
	Vocabulary	(commutative)				
	How many	and subtraction of				
	altogether?	one number from				
	Add	another cannot				
	Take away					
	Make	recognise and use				
	Total	the inverse				
	Greater	relationship				
		between addition				
		and subtraction				
		and use this to				
		check calculations				
		and solve missing				
1	I	. 0		1	1	I

			number problems.					
Division	Early Learning Goals Have a deep understanding of number to 10, including the composition of each number 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. Explore and represent patterns within numbers up to 10, including	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 one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers calculate mathematical statements for multiplication and	recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs show that multiplication of two numbers can be done in any order	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 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 mental and progressing to formal written methods solve problems, including missing number problems, involving	recall multiplication and division facts for multiplication tables up to 12 × 12 use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying by 0 and 1; dividing by 1; multiplying together three numbers recognise and use factor pairs and commutativity in mental calculations multiply two-digit and three-digit numbers by a one-digit number	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 (nonprime) numbers establish whether a number up to 100 is prime and recall prime numbers up to 19 multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication divide numbers up to 4 digits by a two- digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context divide numbers up to 4 digits by a two- digit number using the formal written method of short division where appropriate, or the context

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	evens and odds,	division within the	(commutative)	multiplication and	using formal	multiplication for	interpreting
	double facts and	multiplication	and	division, including	written layout	two-digit numbers	remainders
	how quantities			positive integer			according to the
	can be	tables and write	division of one	scaling problems	solve problems	multiply and	context
	distributed	them using the	number by	and	involving	divide numbers	
	equally.	multiplication (×),	another cannot	correspondence	multiplying and	mentally drawing	perform mental
		division (÷) and		problems in which	adding, including	upon known facts	calculations,
		equals (=) signs	solve problems	n objects are	using the		including with
	Classroom		involving	connected to m	distributive law to	divide numbers	mixed operations
	<u>Activities</u>	show that	multiplication and	objects.	multiply two digit	up to 4 digits by a	and large numbers
	Minibeast	multiplication of	division, using		numbers by one	one-digit number	 identify
	patterns	two numbers can	materials, arrays,		digit, integer	using the formal	common
	Fireflies in a jar	be done in any	repeated		scaling problems	written method of	
	Making equal	order			and harder	short division and	factors,
	pairs	(commutative)	addition, mental		correspondence	interpret	common
		and	methods, and		problems such as	remainders	multiples and
	Vocabulary		multiplication and		n objects are	appropriately for	prime
	Share	division of one	division facts.		connected to m	the context	numbers
	Double	number by	including		objects.		numbers
	Half	another cannot	problems in		00/0013.	multiply and	
	Equal		contexts.			divide whole	use their knowledge
	Same	solve problems	CUITERIS.			numbers and	use their knowledge of the order of
		involving				those involving	
		multiplication and				decimals by 10,	operations to carry
		division, using				100 and 1000	out calculations
							involving the four
		materials, arrays,				recognice and use	operations
		repeated				recognise and use	
		addition montal				square numbers and cube	
		addition, mental					
		methods, and				numbers, and the	
		multiplication and				notation for	
		division facts,				squared (2) and	
		including				cubed (3)	
		problems in					
		contexts.				solve problems	
						involving	
						multiplication and	
						division including	
						using their	
						knowledge of	
						factors and	

rr					
				multiples, squares	
				and cubes	
				solve problems	
				involving addition,	
				subtraction,	
				multiplication and	
				inutiplication and	
				division and a	
				combination of	
				these, including	
				understanding the	
				meaning of the	
				equals sign	
				solve problems	
				solve problems	
				involving	
				multiplication and	
				division, including	
				scaling by simple	
				Scaling by simple	
				fractions and	
				problems	
				involving simple	
				rates.	
				Tates.	

Fractions,	Early Learning	recognise, find	recognise, find	recognise, find,	count up and	recognise and	compare and	use common factors
decimals and	Goals	and name a half	and name a half	name and write	down in tenths;	show, using	order fractions	to simplify
percentages	<u></u>	as one of two	as one of two	fractions 1/3, 1/4,	recognise that	diagrams, families	whose	fractions; use
percentages	Explore and	equal parts of an	equal parts of an	2/4 and 3/4 of a	tenths arise from	of common	denominators are	common multiples
	represent	object, shape or	object, shape or	length, shape, set	dividing an object	equivalent	all multiples of	to express fractions
	patterns within	quantity	quantity	of objects or	into 10 equal	fractions	the same number	in the same
	numbers up to	quantity	quantity	quantity.	parts and in	indecions	the sume number	denomination
	10, including	recognise, find	recognise, find	quality.	dividing one-digit	count up and	identify, name	denomination
	evens and odds,	and name a	and name a	write simple	numbers or	down in	and write	compare and order
	double facts and	quarter as one of	quarter as one of	fractions, for	quantities by 10	hundredths;	equivalent	fractions, including
	how quantities	four equal parts	four equal parts	example $1/2$ of 6	quantities by 10	recognise that	fractions of a	fractions > 1
	can be	of an object,	of an object,	= 3 and recognise	recognise, find	hundredths arise	given fraction,	
	distributed	shape or quantity.	shape or quantity.	the equivalence	and write	when dividing an	represented	add and subtract
	equally.	onape or quantity.	onape or quantity.	of $2/4$ and $1/2$.	fractions of a	object by one	visually, including	fractions with
			recognise, find,	0. 2,	discrete set of	hundred and	tenths and	different
	Classroom		name and write		objects: unit	dividing tenths by	hundredths	denominators and
	Activities		fractions 1/3, 1/4,		fractions and	ten.		mixed numbers,
	Water play		2/4 and 3/4 of a		nonunit fractions		recognise mixed	using the concept of
	Sand play		length, shape, set		with small	solve problems	numbers and	equivalent fractions
			of objects or		denominators	involving	improper	
	Vocabulary		quantity.			increasingly	fractions and	multiply simple
	Parts of a whole				recognise and use	harder fractions	convert from one	pairs of proper
	Half		write simple		fractions as	to calculate	form to the other	fractions, writing
	Quarter		fractions, for		numbers: unit	guantities, and	and write	the answer in its
			example $1/2$ of 6		fractions and non-	fractions to divide	mathematical	simplest form [for
			= 3 and recognise		unit fractions with	quantities,	statements > 1 as	example, 1 quarter
			the equivalence		small	including non-unit	a mixed number	× 1 half = 1 eighth]
			of 2/4 and 1/2.		denominators	fractions where		
						the answer is a	add and subtract	divide proper
					recognise and	whole number	fractions with the	fractions by whole
					show, using		same	numbers [for
					diagrams,	add and subtract	denominator and	example, 1 third ÷ 2
					equivalent	fractions with the	denominators	= 1 sixth]
					fractions with	same	that are multiples	
					small	denominator	of the same	associate a fraction
					denominators		number	with division and
						recognise and		calculate decimal
					add and subtract	write decimal	multiply proper	fraction equivalents
					fractions with the	equivalents of any	fractions and	[for example, 0.375]
					same	number of tenths	mixed numbers	for a simple fraction
					denominator	or hundredths	by whole	[for example, 3
					within one whole		numbers,	eighths]

	compare and order unit fractions, and fractions with the same denominatorswr eq qu denominatorssolve problems that involve all of the above.div tw ide va in om hurorovaluerororovaluero </th <th>ecognise and vrite decimal quivalents to ne quarter, one alf and three uarterssupported by materials and diagramsquivalents to ne quarter, one alf and three uartersread and write decimal numbers as fractions [for example, 0.71 = 71 hundredths]nd the effect of ividing a one- or wo-digit number y 10 and 100, dentifying the alue of the digits n the answer as nes, tenths and undredthsrecognise and use thousandths and relate them to tenths, hundredths and decimal equivalentsound decimals vith one decimal lace to the earest whole umberround decimals with two decimal places to the nearest whole number and to one decimal placeompare numbers vith the same umber of ecimal places up o two decimal lacesread, write, order and compare numbers with up to three decimal placesolve simple neasure and noney problems noney problems no decimal laces.solve problems involving number up to three decimal placesolve simple neasure and noney problems noney problems noney problems noney problems involving fractions nd decimals to wo decimal laces.solve problems involving number up to three decimal placesrecognise the per cent symbol (%) and understand that per cent relates to 'number of parts</th> <th> identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems which require answers to be rounded to specified degrees of accuracy </th>	ecognise and vrite decimal quivalents to ne quarter, one alf and three uarterssupported by materials and diagramsquivalents to ne quarter, one alf and three uartersread and write decimal numbers as fractions [for example, 0.71 = 71 hundredths]nd the effect of ividing a one- or wo-digit number y 10 and 100, dentifying the alue of the digits n the answer as nes, tenths and undredthsrecognise and use thousandths and relate them to tenths, hundredths and decimal equivalentsound decimals vith one decimal lace to the earest whole umberround decimals with two decimal places to the nearest whole number and to one decimal placeompare numbers vith the same umber of ecimal places up o two decimal lacesread, write, order and compare numbers with up to three decimal placesolve simple neasure and noney problems noney problems no decimal laces.solve problems involving number up to three decimal placesolve simple neasure and noney problems noney problems noney problems noney problems involving fractions nd decimals to wo decimal laces.solve problems involving number up to three decimal placesrecognise the per cent symbol (%) and understand that per cent relates to 'number of parts	 identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places solve problems which require answers to be rounded to specified degrees of accuracy
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							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 a half, a quarter, a fifth, 2 fifths, 4 fiths and those fractions with a denominator of a multiple of 10 or 25.	between simple fractions, decimals and percentages, including in different contexts.
Measurement	Early Learning Goals Have a deep understanding of number to 10, including the composition of each number Verbally count beyond 20, recognising the pattern of the counting system	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,	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,	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,	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) measure the perimeter of simple 2-D shapes add and subtract amounts of money to give change, using	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 equivalences between metric	solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass,

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Compare	heavier than,	heavier than,	thermometers	both £ and p in		units and	volume and time
quantities up to 10 in different	lighter than]	lighter than]	and measuring	practical contexts	find the area of	common imperial	from a smaller unit
			vessels		rectilinear shapes	units such as	of measure to a
contexts, recognising	-capacity and	-capacity and		tell and write the	by counting	inches, pounds	larger unit, and vice
when one	volume [for	volume [for	compare and	time from an	squares	and pints	versa, using decimal
quantity is	example,	example,	order lengths,	analogue clock,			notation to up to
greater than, less	full/empty, more	full/empty, more	mass,	including using	estimate,	measure and	three decimal
than or the same	than, less than,	than, less than,	volume/capacity	Roman numerals	compare and	calculate the	places
as the other	half, half full,	half, half full,	and record the	from I to XII, and	calculate different	perimeter of	
quantity;	quarter]	quarter]	results using >, <	12-hour and 24-	measures,	composite	convert between
quantity,			and =	hour clocks	including money	rectilinear shapes	miles and
Development	-time [for	-time [for			in pounds and	in centimetres	kilometres
Matters	example, quicker,	example, quicker,	recognise and use	estimate and read	pence	and metres	
	slower, earlier,	slower, earlier,	symbols for	time with			recognise that
Compare length,	later]	later]	pounds (£) and	increasing	read, write and	calculate and	shapes with the
weight and			pence (p);	accuracy to the	convert time	compare the area	same areas can
capacity.	measure and	measure and	combine amounts	nearest minute;	between	of rectangles	have different
	begin to record	begin to record	to make a	record and	analogue and	(including	perimeters and vice
<u>Classroom</u>	the following:	the following:	particular value	compare time in	digital 12- and 24-	squares), and	versa
Activities				terms of seconds,	hour clocks	including using	
Measuring with	-lengths and	-lengths and	find different	minutes and		standard units,	recognise when it is
non-standard	heights	heights	combinations of	hours; use	solve problems	square	possible to use
measures – feet,			coins that equal	vocabulary such	involving	centimetres (cm2	formulae for area
hand	-mass/weight	-mass/weight	the same	as o'clock,	converting from) and square	and volume of
Baking activities	capacity and	capacity and	amounts of	a.m./p.m.,	hours to minutes;	metres (m2) and	shapes
Scales	volume	volume	money	morning,	minutes to	estimate the area	calculate the
Making playdough				afternoon, noon	seconds; years to	of irregular	area of
-	-time (hours,	-time (hours,	solve simple	and midnight	months; weeks to	shapes	parallelograms
Vocabulary	minutes, seconds)	minutes, seconds)	problems in a		days.		and triangles
Guess			practical context	know the number		estimate volume	 calculate,
Too many	recognise and	recognise and	involving addition	of seconds in a		[for example,	
Too little	know the value of	know the value of	and subtraction of	minute and the		using 1 cm3	estimate and
Same	different	different	money of the	number of days in		blocks to build	compare
Less than	denominations of	denominations of	same unit,	each month, year		cuboids (including	volume of
More than	coins and notes	coins and notes	including giving	and leap year		cubes)] and	cubes and
			change			capacity [for	cuboids using
	sequence events	sequence events		compare		example, using	standard
	in chronological	in chronological	compare and	durations of		water]	
	order using	order using	sequence	events [for			units,
	language [for	language [for	intervals of time	example to		solve problems	including cubic
	example, before	example, before		calculate the time		involving	centimetres
	and after, next,	and after, next,		taken by		converting	(cm3) and
	1			l	1	I	

	Contractory	Contractory	and the sector of the sector	and the first state of	the second second second	. Ister er et e
	first, today,	first, today,	tell and write the	particular events	between units of	cubic metres
	yesterday,	yesterday,	time to five	or tasks].	time	(m3), and
	tomorrow,	tomorrow,	minutes, including			extending to
	morning,	morning,	quarter past/to		use all four	other units
	afternoon and	afternoon and	the hour and		operations to	[for example,
	evening]	evening]	draw the hands		solve problems	mm3 and km3
			on a clock face to		involving measure	
	recognise and use	recognise and use	show these times		[for example,].
	language relating	language relating			length, mass,	
	to dates, including	to dates, including	know the number		volume, money]	
	days of the week,	days of the week,	of minutes in an		using decimal	
	weeks, months	weeks, months	hour and the		notation,	
	and years	and years	number of hours		including scaling.	
			in a day			
	tell the time to	tell the time to				
	the hour and half	the hour and half				
	past the hour and	past the hour and				
	draw the hands	draw the hands				
	on a clock face to	on a clock face to				
	show these times.	show these times.				
		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				
		vessels				

 <u>.</u>			
compare and			
order lengths,			
mass,			
volume/capacity			
and record the			
results using >, <			
and =			
recognise and use			
symbols for			
pounds (£) and			
pence (p);			
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			
involving addition			
and subtraction of			
money of the			
same unit,			
including giving			
change			
Ŭ			
compare and			
sequence			
intervals of time			
tell and write the			
time to five			
minutes, including			
quarter past/to			
the hour and			
the nour and			

			draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day					
Geometry – properties of shape	Development Matters Select, rotate and manipulate shapes to develop spatial reasoning skills. Compose and decompose shapes so that children recognise a shape can have other shapes	recognise and name common 2- D and 3-D shapes, including: -2-D shapes [for example, rectangles (including squares), circles and triangles] -3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	recognise and name common 2- D and 3-D shapes, including: -2-D shapes [for example, rectangles (including squares), circles and triangles] -3-D shapes [for example, 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	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	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 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	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

	within it, just as numbers can. <u>Classroom</u> <u>Activities</u> Shape hunts Feely bags Pin boards Construction challenges <u>Vocabulary</u> Shape curved Straight Point pattern		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.	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.	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.	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.	measure them in degrees (o) identify: angles at a point and one whole turn (total 3600) angles at a point on a straight line and 2 1 a turn (total 1800) other multiples of 900 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.	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.
Geometry – position and direction	Development Matters Continue, copy and create repeating patterns <u>Classroom</u> <u>Activities</u> PE sessions	describe position, direction and movement, including whole, half, quarter and threequarter turns.	describe position, direction and movement, including whole, half, quarter and threequarter turns. order and arrange combinations of mathematical	order and arrange combinations of mathematical objects in patterns and sequences use mathematical vocabulary to describe position, direction and		describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the	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) draw and translate simple shapes on the coordinate plane, and reflect them in the axes.

	Topic hooks Physical development Communication and Language activities Daily routines – lining up throughout the day <u>Vocabulary</u> On Under Over Forwards Backwards Up Down	objects in patterns and sequences use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).	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).		left/right and up/down plot specified points and draw sides to complete a given polygon.		
Statistics		interpret and construct simple pictograms, tally charts, block diagrams and simple tables ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	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	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	interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. solve comparison, sum and difference problems using	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.

		ask and answer questions about totalling and comparing categorical data.	ask and answer questions about totalling and comparing categorical data.	scaled bar charts and pictograms and tables.	information presented in bar charts, pictograms, tables and other graphs.	
Ratio and Proportion						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 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				use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns

								enumerate possibilities of combinations of two variables.
Vocabulary	Vocabulary Use and understanding of vocabulary is crucial to our maths curriculum and we strive to ensure children can use and explain a range of vocabulary. Maths vocabulary is detailed within Maths No Problem. Staff are advised to begin each unit by gathering Vocabulary from the unit, discussing and putting onto the maths working wall. This can then be added to throughout the unit. Additionally, there is an EYFS vocabulary list below and a list of mathematical vocabulary to be learned by the end of Y6.						·	
How has the maths curriculum taken into account the needs of our children?	Throughout year grupoint do we insist the learning to them. In addition to this, o building to greater do work based on these. We aspire that all of child can access the In some cases, childred curriculum is adapter. For children who are demonstration their challenge work at the a challenge area who	at the practical equip ne of the core concep lepth questioning thro e questions to ensure our learners will achie whole lesson. ren will not be able to d to their needed. Thi e more able, we want greater understandin e end of the lesson. A	of practical-pictorial- ment needs to be take ts of mastery is 'variar oughout. As such, for s that they has mastere eve in each lesson and access the curriculum s action plan will be e them to be able to de g is through explanati n ability to clearly arti ailored questions that	abstract to tackle conc en away and this is be tion'- in particular 'pro truggling/SEND learne d this element. d we use daily interver n at the same level of to valuated and updated epen their knowledge ion. This can be throug iculate their own under relate to their curren	neficial to children wh ocedural variation.' Th er we can ask them to ntion to ensure any ga the peers. The childrer I termly. and understanding of gh explanation to their erstanding of what the	o are struggling learne is means that questior complete the first few ps or misconceptions a n will have an individua the day's learning. Or r peers in different par y have learnt shows a	the lesson in a way the ers of those with SEND as are written to slowly questions and then m are plugged on the day alised action plan to er he way of ensuring the ts of the lesson and ca mastery. Additionally earning in different cor	as we can tailor y build knowledge, hove onto additional y meaning that every hsure that the more able are n also be part of their , each classroom has

Larry reals roundation sta	ge mathematics vocabulary
Rote Counting	Counting and Subitising
number	number
zero, one, two, three to twenty and beyond	zero, one, two, three to twenty and beyond
zero, ten, twenty one hundred	zero, ten, twenty one hundred
none	none
count, count (up) to	count, count (up) to
count on (from, to)	count on (from, to)
count back (from, to)	count back (from, to)
count forwards	count forwards
count backwards	count backwards
count down	count down
count in ones, twos tens	count in ones, twos tens
pattern	how many?
before, after, between	pattern, arrangement
	sensible guess
	estimate
Comparing Amounts	Number Sense and Place Value
number	number
zero, one, two, three to twenty and beyond	zero, one, two, three to twenty and beyond
compare	part – part – whole
order	group of ten
equal to	pattern
the same as	more, less
more, most	greater, lesser/smaller amount
less, fewer, least, fewest	-
greater amount, greatest amount	
smaller amount, smallest amount	
before, after	
lots, many	
few	
nearly, close to, about the same as	
just over, just under	
too many, too few, enough, not enough	
Number Recognition	Number Graphics
read	represent
identify, match	show, draw, make, write
order	own way
	explain
	thinking
Calculation – Addition	Calculation – Subtraction
part – part – whole	part – part – whole
add, and, combine	take (away), leave, left (over)
make, sum, total, altogether	how many have gone?
equals, equal to, is the same as	how many more to make?
score	how many more is than?
double	equals, equal to, is the same as
one more, two more, ten more	one less/fewer, two less/fewer, ten less/fewer
more than is	

Early Years Foundation Stage Mathematics Vocabulary

Number Fractions	
share (sharing) equally	
equal parts	
half, halving	
double, doubling, adding same number	
2-D Shape	3-D Shape
circle, triangle, square, rectangle, oblong	sphere, cube, cuboid, cone
flat, side, straight, curved	solid, face, flat, surface, curved
sharp, pointed, corner, vertex	edge
different size, position	sharp, pointed, corner, vertex
same, different	different size, position
pattern, repeating, symmetrical	same, different
recognise, identify, match	recognise, identify, match
	roll
	build
Space	
on top, under(neath)	
in front of, behind, next to, between	
above, below	
first, last	
second, third, fourth	
forwards, backwards	
up, down, turn	
pattern, repeating	
next, after, before	
Statistics – Matching and Sorting	
same, different	
sort, match	
features	
in common	
Measurement – Distance	Measurement – Weight/Mass
measure	measure
size	size
compare, order	compare, order
guess, estimate	guess, estimate
nearly, close to, about the same as	nearly, close to, about the same as
just over, just under	just over, just under
length, width, height	weigh, balance
long, short, wide, narrow, tall	heavy, light
longer, longest	heavier, heaviest
wider, widest	lighter, lightest
narrower, narrowest	

This vocabulary list of 142 words and phrases details the words and definitions that children need to know and use by the end of Key Stage 2. It is adapted from the *'Ultimate Maths Vocabulary List'* from Third Space Learning.

Term	Definition	Notes
Acute	Describes angles between 0 and 90 degrees.	
Addition	One of the four calculation operations. It involves combining two or more numbers to create a sum/total. The inverse of subtraction.	
Adjacent	Adjoining (as used to describe lines and angles).	
Alternate	Every other one in a sequence.	
Angle	A measure of turn - the number of degrees rotated around a point.	
Area	The measure of surface within a perimeter expressed in square units.	
Array (rectangular)	A set of items arranged in rows and columns in the shape of a rectangle. Each row has the same number of items in it. Each column has the same number of items in it.	
Ascending order	The arrangement of numbers from least to greatest.	
Average	A number representing a greater set of numbers. Can have three interpretations:	

Axis of symmetry	 mean - dividing the total of the numbers by the numbers itself; median - the middle value when the numbers are in ascending or descending order; mode - the value that occurs most often in the set. A line dividing a shape into two 	
	symmetrical parts.	N .
Term	Definition	Notes
Bar chart/graph	A graphical representation of data in which values are represented by bars or columns and interpreted using the scales on the axes.	
Bar model	A way of representing relationships in a structured diagram in which numbers are shown using bars (rectangles).	
Base	The line or face on which a shape is standing.	
Base angles	Those angles adjacent to the base of a shape.	
Bisect	To divide into two equal parts.	
Block graph	A way of representing discrete data in which each item is represented by one block/square arranged in columns. The frequency of a particular set is how many blocks or squares are in it.	

Breadth	Breadth is another name for width. It is the distance across from side to side or the shorter measurement with the longer one described as length.	
Term	Definition	Notes
Capacity	The amount of space in an object (the maximum amount of liquid or air it can contain).	
Cardinal number	A number that shows quantity but not order.	
Carroll diagram	A diagram used for classification identifying whether members of the set possess a given property or not.	
Circumference	The distance around a circle (its perimeter).	
Circle	A 2-D shape in which all of the points on the edge are of equal distance from the centre of the shape.	
Composite	A number with more than two	
number	factors.	
Cone	A 3-D shape made of one circular face and a curved surface tapering to a point (apex) directly above the centre of the circular face.	
Congruent	Congruent shapes are the same shape and size (equal).	

order without interruption (e.g.	
2,3,4,5).	
Data that can take any value along	
a continuum, e.g. as a child's foot	
grows, it will go through all the	
values of 18.1cm, 18.2cm, 18.3cm	
etc.	
Numbers used to describe position	
of a point on a grid.	
A regular six-sided polyhedron in	
which the faces are all congruent	
squares.	
A six-sided polyhedron in which all	
the faces are rectangles. Otherwise	
known as a rectangular prism.	
A 3-D shape made of two	
congruent circular faces that are	
opposite each other and a curved	
surface joining them.	
Definition	Notes
A polygon with ten sides and	
angles.	
A way of expressing fractions in	
the Base 10 number system.	
Fractional parts are expressed in	
tenths, hundredths, thousandths	
etc.	
	Data that can take any value along a continuum, e.g. as a child's foot grows, it will go through all the values of 18.1cm, 18.2cm, 18.3cm etc. Numbers used to describe position of a point on a grid. A regular six-sided polyhedron in which the faces are all congruent squares. A six-sided polyhedron in which all the faces are rectangles. Otherwise known as a rectangular prism. A 3-D shape made of two congruent circular faces that are opposite each other and a curved surface joining them. Definition A polygon with ten sides and angles. A way of expressing fractions in the Base 10 number system. Fractional parts are expressed in tenths, hundredths, thousandths

	The number below the line in a	
Denominator	fraction which shows how many	
	equal parts the whole has been	
	split into.	
Descending order	The arrangement of numbers from	
Descending of def	the greatest to least.	
	A straight line connecting two non-	
Diagonal	adjacent vertices (corners) of a	
	polygon.	
	A line across a circle that passes	
Diameter	through the centre and touches the	
	circumference at each end.	
	The answer to a subtraction	
	calculation. A form of subtraction	
	in which two amounts/numbers	
Difference	are compared. By how much a	
	number is greater or less than	
	another.	
	The numerical symbols from 0 to 9	
Digit	(inclusive). Digits can be arranged	
Digit	to numerically represent numbers.	
	The digital root of 58 is 4 because	
Digital root	5 + 8 = 13 and $1 + 3 = 4$	
	The measurements of a shape (i.e.	
Dimensions		
	length, width, height).	
	Data that can only take specific	
Discrete data	values, e.g. as a child's foot grows,	
	the shoe sizes needed can only	
	have given sizes.	

Division	One of the four calculation operations. It can be interpreted as: repeated subtraction (grouping) – finding how many groups of a given equal size can be made from a number; sharing a number into equal parts. It is the inverse of multiplication.	
Dodecagon	A twelve sided polygon.	
Term	Definition	Notes
Edge	The intersection of two faces/curved surfaces of a three- dimensional object.	
Equation	A statement of equality between two expressions (e.g. $3 \times 4 = 6 + 6$).	
Equilateral triangle	A triangle with congruent (equal) sides and angles. It also has three axes (lines) of symmetry.	
Even number	A positive or negative number exactly divisible by 2.	
Exterior	Outside.	
Term	Definition	Notes
Face	A plane (flat) surface of a three- dimensional object.	
Factor	A number which will divide exactly into another number.	
Fraction	A number in its own right that can be positioned on a number line.	

	A way of expressing a proportion (part of a whole). The outcome when you divide an integer by another integer (e.g. $3 \div 4 = \frac{3}{4}$)	
Frequency	The number of times something occurs within a study.	
Term	Definition	Notes
Greater than	An inequality between numbers. The symbol used to represent greater than is an arrow pointing towards the smallest number.	
Term	Definition	Notes
Hemisphere	A 3-D shape made up of a circular face and a curved surface. It is half of a sphere.	
Hendecagon	A polygon with eleven sides and eleven angles: also called an undecagon.	
Heptagon	A polygon with seven sides and seven angles: also called a septagon.	
Hexagon	A polygon with six sides.	
Horizontal	Describes a line or plane parallel to the horizon.	
Term	Definition	Notes
Improper fraction	A fraction whose numerator is equal to or greater than its denominator.	

	A nogotivo or nogitivo veholo	
Integer	A negative or positive whole	
	number.	
Interior	Inside.	
Intersection	The point or line where two lines	
inter section	or two faces meet.	
	Polygons which do not have all	
Innerulan shan as	equal sides and angles or	
Irregular shapes	polyhedrons which do not have all	
	congruent faces and angles.	
	A triangle which has two sides of	
	equal length and two equal angles.	
Isosceles triangle	It also has one axis (line) of	
	symmetry.	
Term	Definition	Notes
	A quadrilateral that has two	
	*	
	adjacent pairs of sides that are	
Kite	adjacent pairs of sides that are	
Kite	equal in length, and at least one	
	equal in length, and at least one pair of opposite angles are equal.	Notos
Kite Term	equal in length, and at least one pair of opposite angles are equal. Definition	Notes
	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers.	Notes
	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less	Notes
Term	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less than is an arrow pointing towards	Notes
Term Less than	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less than is an arrow pointing towards the smallest number.	Notes
Term	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less than is an arrow pointing towards the smallest number. (See axis of symmetry).	Notes
Term Less than Line of symmetry	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less than is an arrow pointing towards the smallest number. (See axis of symmetry). A representation of data collected	Notes
Term Less than	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less than is an arrow pointing towards the smallest number. (See axis of symmetry). A representation of data collected over time. Each point along the line	Notes
Term Less than Line of symmetry	equal in length, and at least one pair of opposite angles are equal. Definition An inequality between numbers. The symbol used to represent less than is an arrow pointing towards the smallest number. (See axis of symmetry). A representation of data collected	Notes

	m . C.1	
	The measurement of the quantity	
Mass	of matter in an object, measured in	
	grams and kilograms.	
	An average of a set of numbers.	
Mean	The sum of the values in a set of	
Mean	data divided by the total number of	
	items in that set.	
	An average of a set of numbers.	
Madian	The middle value when the	
Median	numbers are in ascending or	
	descending order.	
	An average of a set of numbers.	
Mode	The value that occurs the most	
	often in a set of data.	
Multiple	The product of a given number	
Multiple	with another factor.	
	One of the four calculation	
	operations. It can be interpreted	
	as:	
	repeated addition – adding the	
Multiplication	same number to itself a number of	
	times;	
	scaling – making a number so	
	many times greater (or smaller)	
	It is the inverse of division.	
Term	Definition	Notes
	A number less than 0. Indicated by	
Negative number	a	
	- sign before the numeral and read	

Odd number	A number that when divided by	
Ordinal number	two leaves a remainder of one. Describes a position in a sequence e.g. first, second, third etc.	
Term	Definition	Notes
Parallel lines	Lines with no common points and always the same distance apart.	
Parallelogram	A four-sided polygon with opposite sides equal and parallel and the opposite angles are equal in size.	
Part-part-whole	The understanding of how a number (whole) can be shown to be the sum of two parts. It can be used to represent the relationship between the four operations.	
Partition	The action of splitting a number into parts.	
Pentagon	A polygon with five sides and angles.	
Percentage	A way of describing a proportion of an amount by expressing it out of (every) 100.	
Perimeter	The distance around the boundary of a shape.	
Perpendicular line	A line at right angles to another line or plane. <i>NB The lines do not</i> <i>have to be touching.</i>	
Pictogram	A way of representing discrete data in which a picture or icon is	

	· · · · ·	
	used to represent each item or a	
	given number of items.	
Pie chart	A way of representing data where the total is represented by a circle (pie) and each category shown by a sector of the circle which indicates the frequency of the category.	
Polygon	A plane (flat) shape with straight sides.	
Polyhedron	A three dimensional shape with plane (flat) faces.	
Place value	Indicates the position of a numeral (e.g. the place value of the 3 in 738 is 30) and how numbers relate to other numbers within the Base 10 number system.	
Prime number	A number with only two factors, 1 and itself (e.g. 2,3,5,7,11, 13, 17, 19, 23)	
Prism	A polyhedron (3-D shape with faces and no curved surfaces) in which opposite ends are congruent and these are joined by rectangular faces.	
Product	The result when two or more numbers are multiplied.	
Pyramid	A polyhedron made of a polygon base with straight edges coming	

	from each vertex of the base meeting at a single point (apex). All the other faces are therefore triangular.	
Term	Definition	Notes
Quadrant	The sectors of a coordinate grid are called quadrants. They are named first (+,+), second (-,+), third (-,-) and fourth (+,-) A quarter of the area of a circle which also contains a right angle.	
Quadrilateral	A polygon with four sides and angles.	
Quotient	The result when one number is divided by another number.	
Term	Definition	Notes
Radius	A line in a circle from the centre to the edge. It is half the diameter.	
Ratio	An expression of the comparison between two or more quantities found by dividing one quantity by the other.	
Rectangle	A quadrilateral with opposite sides equal and parallel and containing four right angles.	
Rectilinear	A polygon made of lines meeting at right angles.	

Reflection	The image of a shape in a 'mirror line'. Corresponding points of the shape and its reflection are equidistant from the 'mirror line'.	
Reflex angle	An angle greater than 180 degrees.	
Regular	In geometry when a polygon has sides of equal length and angles of equal size or when a polyhedron has congruent faces and internal angles where faces meet. The only regular polyhedrons are tetrahedron, cube, octahedron, dodecahedron and icosahedron.	
Rhombus	A parallelogram with equal length sides. Opposite sides are parallel and opposite sides are equal in size.	
Roman numerals	Seven letters are used in combination to write numbers: I = 1 V = 5 X = 10 L = 50 C = 100 D = 500 M = 1000	
Rotation	Turning around a given point – the centre of rotation.	
Rotational symmetry	A shape is said to have rotational symmetry if it looks the same in different positions when rotated about its centre.	

	An approximation used to express	
Rounding	a number in a more convenient	
in an	way.	
Term	Definition	Notes
	A triangle that has three sides of	
Scalene triangle	different length and no equal	
	angles.	
	A 2-D shape with one straight side	
Semi-circle	and one curved edge. It is one half	
	of a circle.	
Sphere	A 3-D shape with one curved	
	surface in which every point on the	
	surface is equidistant from the	
	centre of the shape.	
Squared	A number squared is a number	
	multiplied by itself.	
	The product of a number	
Square number	multiplied by itself. A number	
	whose units can be arranged into a	
	square (e.g. 1, 4, 9, 16, 25, 36, 49,	
	64).	
	One of the four calculation	
Subtraction	operations. It can be interpreted	
	as:	
	- take away, in which one number	
	is removed from another;	
	- difference, in which two numbers	
	are compared.	

Sum	The result when two or more	
	numbers are added together.	
Symmetrical	A shape is symmetrical if it is	
	identical on either side of a line	
	dividing it into two parts.	
Term	Definition	Notes
Tally	A system of collecting data when	
	the final total for each category	
	cannot be determined	
	immediately. Items are recorded	
	using vertical lines for numbers	
	less than 5 and an oblique line	
	across the vertical lines to show a	
	group of 5.	
Temperature	The measure of hot and cold.	
	Shapes fitted together with a	
Tessellation	number of exact copies and with	
	no overlaps or gaps.	
Tetrahedron	A polyhedron with four faces.	
Translation	This takes place when a shape is	
	moved from one place to another	
	just by sliding it (without rotating,	
	reflecting or enlarging).	
Trapezium	A quadrilateral with only one pair	
	of parallel sides.	
Triangle	A polygon with three sides and	
	angles. They can be scalene,	
	isosceles or equilateral, and also	
	described as right angled.	

Triangular number	A number created by adding consecutive numbers from starting from 1). A number whose units can be arranged into a triangle (e.g. 1, 3, 6, 10, 15, 21)	
Term	Definition	Notes
Venn diagram	A diagram used for classification identifying whether members of the set possess given properties.	
Vertex	The point at which two sides of a 2-D shape meet or two or more edges of a polyhedron meet.	
Vertical line	A line which is at right angles to a horizontal line.	
Volume	The amount of liquid in a container or the amount of three- dimensional space taken up by an object, measured in cubic units.	
Term	Definition	Notes
Weight	The force of gravity on an object, measured in newtons.	
Term	Definition	Notes
x axis	The horizontal line on a graph or coordinate grid.	
Term	Definition	Notes
y axis	The vertical line on a graph or coordinate grid.	