

Progression of Knowledge, Skills and Vocabulary Year 2								
	Number and place value	Addition and subtraction	Multiplication and Division	Fractions	Measurement	Geometry: Shape	Geometry: Position and Direction	Statistics
I know	Each digit in a number represents a different value and can identify them all to a hundred. How to count forward/backwards in multiples of 2, 3, 5 and 10 we must increase/decrease by the same difference each time. There are ten hundreds in a thousand. < Means smaller than, > means bigger than and = represents the same value.	My number bonds to 100. Formal/ informal methods of calculation and how column addition/subtraction is applied for larger numbers. How to mentally calculate additions and subtractions. Addition can be done in any order, but to perform subtraction the smaller number has to be taken from the larger number. Subtraction is the inverse of addition.	Symbols represent mathematical commands multiplication (×), division (÷) and equals (=) signs Number sentences can be shown through materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. 2, 5 and 10 times tables and their division facts. The multiplication of two numbers can be done in any order.	A length, shape, set of objects or quantity can be split up into equal parts and that these are called fractions. When we split a shape into: 2 parts = $\frac{1}{2}$, 4 parts= $\frac{1}{3}$. When writing a fraction, the numerator expressing the amount of parts and the denominator express the total amount of parts. A fraction can hold an equal value with another fraction. I.e. $\frac{2}{4} = \frac{1}{2}$	g, kg represent weight. cm,m,km represent distance/height, ml,l represent capacity Different instruments need to be selected to measure. Each coin or note holds a specific value and that we can substitute these for different coins with an equivalent value. Time can be written in 12/hour and 24 hour and the times although expressed with different number may represent the same time. I know that: there are 24 hours in a day and 60 minutes in an hour.	Symmetry is a reflection of an object across a mirror line. 2d shape properties include the number of sides, vertices (corners) and lines of symmetry. Lines of symmetry. Lines of symmetry can be found in the centre of a 2d shape vertically and horizontally. 3-D shapes have defining features including the number of edges, vertices and faces. The faces of 3d shapes are mainly made up of 2d shapes.	Patterns and sequences occur when combinations of objects and sequences occur more than once. Rotation is described initially as a turn and progresses to right angles for quarter, half and three- quarter turns (The direction of clockwise and anti- clockwise.	Pictograms, tally charts, block diagrams and simple tables show data and information. Categories are used to separate information. Data is placed in charts and diagrams to provide a comparison.

2, 3, and 5 from 0, and in tens rom and promate subtraction: using rom and pictorial and backwardwith addition and subtraction: using and pictorialname and write fractions ¼, ¾ and ¼ sofa length, shape, set of objects or length/height in subtraction facts including odd and evend representations, including theref representations, including it numbers in including representations, including and write estimateappropriate appropriatedescribe the standard units to stapes, including odjects in objects in symmetry in a vertical linearrange combinations properties of 2-D shapes, including describe the mathematical derive and use representations, including representations, including addition and estimate numbers to at lincluding representations, including represent ad including repres	So I can	Count in steps of	Solve problems	Recall and use	Recognise, find,	Choose and use	Identify and	Order and	Interpret and
0, and in tens from any number, forward and backwardsubtraction: using concrete objects facts for the 2, facts for the 2, facts for the 2, 24 and % of a and backwardfractions %, %, 24 and % of a least 100standard units to estimate and standard units to properties of 2-Dcombinations pictograms, t charts, block diagrams and siges and lineRecognise the place value of each digit name (tens, ones)Recall and use addition and subtraction facts underve and use related facts up to pictorial including the numbers to at least 100 in number sto at least 100 in numerals and in numers so to least 100 in numers		2, 3, and 5 from	with addition and	multiplication	name and write	appropriate	describe the	arrange	construct simple
from any number, forward and backwardconcrete objects and pictorial representationsfacts for the 2, s and 10 total and pictorial2/4 and % of a length, shape, set unutplication dobjects or quantityestamate and measureshapes, including to objects in any directionof mathematical diagrams and simple tables simple tables minubersRecognise the place value of each digit name tow-digit numberRecall and use addition and subtraction facts tow-digit numberRecall and use addition and subtraction facts tow-digit numberRecall and use addition and addition and derive and use represent and estimate number susing differentCalculate mathematical numbers using oncrete objects, pictorial and mentally, including: a two- digit number and one half.estimate and mathematical and ervice and tow quarters and and mentally, including: a two- digit number ine numbers to at least 100 in numers to at least 100 in numers to at least 100 in numers can be done in any order and one in any order and unumers to at least 100 in numers to at least		0, and in tens	subtraction: using	and division	fractions ⅓, ¼,	standard units to	properties of 2-D	combinations	pictograms, tally
number, forward and backwardand pictorial representations5 and 10length, shape, set of objects or quantitymeasurethe number of sides and line sides and line and wirterionmathematical objects in sequencesdiagrams and simple tables simple tablesRecognise the place value of ach digit in a two-digit number (tens, ones)Recall and use addition and subtraction facts to 20 fluently, and to 20 fluently, andRecall and use to 20 fluently, and to 20 fluently, andCalculate mumbers to 20 fluently, and to 20 fluently, andWrite simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half.Measure, is the number of and even the number of sequencesUse works (%p(p); temperature (*C); capacity muters using one half.Identify and recognise the equivalence of two quarters and one half.Use movement ina addivision movement ina tables and write themVirite simple representations, including the representations, and mentally, including: a two- digit numbers using form 0 up to 100.Add and subtrat representations, and mentally, including: a two- digit numbers to at least 100 in numbers to at least 100 in numers to at <b< th=""><th></th><th>from any</th><th>concrete objects</th><th>facts for the 2,</th><th>2/4 and ¾ of a</th><th>estimate and</th><th>shapes, including</th><th>of</th><th>charts, block</th></b<>		from any	concrete objects	facts for the 2,	2/4 and ¾ of a	estimate and	shapes, including	of	charts, block
and backwardrepresentationsmultiplication tables, including odd and even addition and each digit in a to 20 fluently, and (tens, ones)Recall and use addition and addition and addition and to 20 fluently, and (tens, ones)Recall and use addition and and even numbersfor bipets or quantitylength/height in any direction any direction (kg/g); temperature (°C); capacitysides and line sides and line ymmetry in a yequical sequencesobjects in simple tables and and sequencesIdentify, represent and estimate numbers using different including the number lineAdd and subtract numbers using pictorial mathematial, including tables and oneCalculate mathematical and division and division and division and metally, write themCalculate recognise the equivalence of two quarters and one half.length/height in any direction any direction any directionsides and line ymmetry in a yequencesobjects in sides and answ simple quast addition of two numbers using pictorial representations, including a two- digit number and onesmutiplication results using >, < show that and metally, any order and onesCalculate mathematical statements for mutiplication representations, including a two- digit numbers can be done in any order and onesShow that any order and any order and addition of two numbers to at least 100 in numbers to at least 100 in numerals and in wordsNow that any order and addition of two numbers on a test tables and any order and any order and onesShow that any order and <br< th=""><th></th><th>number, forward</th><th>and pictorial</th><th>5 and 10</th><th>length, shape, set</th><th>measure</th><th>the number of</th><th>mathematical</th><th>diagrams and</th></br<>		number, forward	and pictorial	5 and 10	length, shape, set	measure	the number of	mathematical	diagrams and
Recognise the place value of each digit na two-digit number (tens, ones)Recall and use addition and subtraction facts to 20 fluently, and (tens, ones)tables, and even numbers to 20 fluently, and (tens, ones)quantity including odd and even fact sup to tatements for multiplication tables and write themquantityany direction (m/cm); mass (m/cm); masssymmetry in a vertical linepatterns and sequencesAsk and answ simple questi tables, imple questi including odd and even (ters, ones)patterns and sequencesAsk and answ simple questi tables, imple questi describe the mathematical statements for multiplication and division tables and write themmathematical tables and write themuseJack and answ sequencesAsk and answ sequencesCompare and order lengths, including the number line unmbers to at least 100 in numerais and in wordsAdd and subtract numbers diftion of two numbers to at least 100 in numerais and in wordsRecall and use and terms and even and evenand even and even and facessymmetry in a wertical line (compare and of two numbers can be done in any order and division of one numerais and in wordssymmetry in a wertical linesymmetry in a wertical linesymmetry in a wertical linesequencesAsk and answ simple question capacity (litres/mi).Recognise the pattern at digit number and numbers to at least 100 in numerais and in wordsAdd and subtract representations, including: atwo- digit number and ord two numbers can be done in any order a		and backward	representations	multiplication	of objects or	length/height in	sides and line	objects in	simple tables
and subtraction of Solve problems combinations of Objects. anti-clockwise).		and backward Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations, including the number line Compare and order numbers from 0 up to 100. Read and write numbers to at least 100 in numerals and in words	representations Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two- digit number and ones Show that addition of two numbers can be done in any order (commutative) and subtraction of	multiplication tables, including odd and even numbers Calculate mathematical statements for multiplication and division within the multiplication tables and write them Show that multiplication of two numbers can be done in any order and division of one number by another cannot	of objects or quantity Write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half.	<pre>length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml). Compare and order lengths, mass, volume/capacity and record the results using >, < and = Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value Find different combinations of</pre>	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.	objects in patterns and sequences Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line Distinguish between rotation as a turn and in terms of right angles for quarter, half and three- quarter turns (clockwise and anti-clockwise).	simple tables Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totalling and comparing categorical data.
Use place value one number from involving coins that equal		Use place value	one number from	involving		coins that equal			
and number facts another cannot multiplication the same amounts		and number facts	another cannot	multiplication		the same amounts			
to solve Recognise and use and division, of money		to solve problems.	Recognise and use	and division,		of money			

relationship	solve simple
between addition	problems in a
and subtraction	practical context
and use this to	involving addition
check calculations	and subtraction of
and solve missing	money of the
number problems.	same unit,
	including giving
	change
	Ŭ l l l l l l l l l l l l l l l l l l l
	Tell and write the
	time to five
	minutes, including
	quarter past/to
	the hour and draw
	the hands on a
	clock face to show
	these times
	Know the number
	of minutes in an
	hour and the
	number of hours
	in a day

Vocabulary I	one-, two-,	addition, sum	lots of, groups of, x	part	£ and p	Higher, lower	property surface	table, column.
will use	three-digit	one hundred more	times, multiply,	' equal parts	note (and the names	straight line	circular, triangular,	row, diagram
	place value	one hundred less	multiplication	fraction one	of notes) bought,	plan	rectangular	cany, cany chart
		subtraction	indipiloution	whole	sold, change	compass point	oblong, pentagon,	block diagram
	thousand	tens houndary	multiple of	one half two	measuring scale		hexagon, octagon	pictogram
	sequences		product	halves	about	north, south, east,	quadrilateral, kite,	represent label,
	continue	calculation	once, twice, three		about	west (NSEW)	polygon, prism	title scale
	partition		timesten times	one quarter,	further, furthest		vertical/	most popular.
	sequence	symbol	as big long	two three	m to represent	clockwise, anti-	horizontal	least popular
	consecutive	difference	wide as	four quarters	metre, centimetre	clockwise, right		most common,
	value, rule	inverse		one third	(cm) tape measure	angle, straight line	edge, vertex,	least common
	stands for.		repeated addition				vertices	category
	represents		array		mass, weight		2D, 3D	
			row, column		kilogram (kg), half-			
	twenty-first,		ala ana ann a lla i		kilogram, gram (g)		line of symmetry,	
	twenty-		share equally		capacity, volume		mirror line,	
	second exact,		one each, two				renection	
	chaetty		each, three each		contains			
	round, nearest		group in pairs,		litre (l), half-litre,			
	> and <		threestens equal		millilitre (ml)			
	numeral		groups of		January,			
			÷ divide, divided		FebruaryDecember			
			by, divided into		fortnight			
			divisioninverse		minute second			
					quarter to, quarter			
					past digital clock,			
					analogue clock			
					temperature.			
					thermometer, °C			