

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2					
			RAN	IGE 4							
	Comparison Beginning to compare and recognise changes in numbers of things, using words like more, lots or 'same' Counting										
EYFS											
		der, some of which are in the ri		lity (How many?)							
	Beginning to notice numeral	or gives two or three objects f	rom a group								
	Beginning to count on their f										
	Spatial Awareness	lingers									
		around objects and explores fi	itting into spaces • Begins to i	remember their way around fa	miliar environments Respond	s to some spatial and					
	positional language										
		m different viewpoints includir	ng things that are near or far a	away							
	Shape										
		Chooses puzzle pieces and tries to fit them in									
	Recognises that two objects	have the same shape									
	Makes simple construction										
	Pattern										
	Joins in and anticipates repeated sound and action patterns										
	Measures	Is interested in what happens next using the pattern of everyday routines									
		length, weight and capacity									
	Explores differences in size, length, weight and capacity Beginning to understand some talk about immediate past and future										
	Beginning to anticipate times of the day										
	RANGE 5										
	Comparison	. . .		6 1 1 1 1 1							
		of up to five objects, saying wh	ien there are the same numb	er of objects in each group, e.g	. You've got two, I've got two	. Same! Counting					
	May enjoy counting verbally		aach itam uicing tha stable or	dor of 1 2 2 4 E							
		n item, saying one number for e nd number language within pla									
	Begin to recognise numerals		ay, and may show taschiduon	with large numbers							
	Cardinality										
	Subitises one, two and three	objects (without counting)									
	Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle)										



Thomas Buxton Primary School Learning Together

Links numerals with amounts up to 5 and maybe beyond
Explores using a range of their own marks and signs to which they ascribe mathematical meanings Composition
Through play and exploration, beginning to learn that numbers are made up of smaller numbers
Beginning to use understanding of number to solve practical problems in play and meaningful activities
Beginning to recognise that each counting number is one more than the one before
Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same
Spatial Awareness
Responds to and uses language of position and direction
Predicts, moves and rotates objects to fit the space or create the shape they would like
Shape
Chooses items based on their shape which are appropriate for the child's purpose
Responds to both informal language and common shape names
Shows awareness of shape similarities and differences between objects
Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes
Attempts to create arches and enclosures when building, using trial and improvement to select blocks
Pattern
Creates their own spatial patterns showing some organisation or regularity
Explores and adds to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC)
Joins in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next
Measures
In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items
Recalls a sequence of events in everyday life and stories
RANGE 6
Comparison
Uses number names and symbols when comparing numbers, showing interest in large numbers
Estimates of numbers of things, showing understanding of relative size Counting
Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0
Increasingly confident at putting numerals in order 0 to 10 (ordinality)
Cardinality
Engages in subitising numbers to four and maybe five
Counts out up to 10 objects from a larger group
Matches the numeral with a group of items to show how many there are (up to 10)
Composition



Maths Curriculum Map

Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three • In practical activities, adds one and subtracts one with numbers to 10

Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and '+ or '-' Spatial Awareness

Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning)

May enjoy making simple maps of familiar and imaginative environments, with landmarks

Shape

Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes

Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build

Pattern

Spots patterns in the environment, beginning to identify the pattern "rule"

Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat

Measures

Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy Becomes familiar with measuring tools in everyday experiences and play

Is increasingly able to order and sequence events using everyday language related to time

Beginning to experience measuring time with timers and calendars

Early Learning Goals

Number

Children at the expected level of development will

Have a deep understanding of number to 10, including the composition of each number; 14

Subitise (recognise quantities without counting) up to 5

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.

Numerical Patterns

Children at the expected level of development will

Verbally count beyond 20, recognising the pattern of the counting system

Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity

Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.



	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	Number: Place Value (within	Geometry: Shape	Measurement: Time (taught	Number: Place Value (within	Measurement: Time (taught	Number: Place Value (within
	<u>10)</u>		<u>daily)</u>	50) Including multiples of 2, 5	<u>daily)</u>	<u>100)</u>
YEAR 1	Count to 10, forwards and backwards, beginning with 0 or 1, or from any given number	Recognise and name common 2-D shapes, including: rectangles (including squares), circles and triangles	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow,	and 10 Count to 50 forwards and backwards, beginning with 0 or 1, or from any number	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow,	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
	Count, read and write numbers to 10 in numerals and words	Recognise and name common 3-D shapes including: cuboids (including cubes), pyramids and spheres	morning, afternoon and evening) Recognise and use language relating to dates, including days of the week, weeks,	Count, read and write numbers to 50 in numerals. Given a number, identify one	morning, afternoon and evening) Recognise and use language relating to dates, including days of the week, weeks,	Count, read and write numbers to 100 in numerals Given a number, identify one
	Given a number, identify one more and one less	<u>Number: Place Value (within</u> 20)	months and years Tell the time to the hour and half past the hour and draw	more or one less Identify and represent	months and years Tell the time to the hour and half past the hour and draw	more and one less Identify and represent
	Identify and represent numbers using objects and	Count to 20, forwards and backwards, beginning with 0	the hands on a clock face to show these times	numbers using objects and pictorial representations	the hands on a clock face to show these times	numbers using objects and pictorial representations
	pictorial representations including the number line, and use the language of:	or 1, or from any given number	Compare, describe and solve practical problems for time [for example, quicker, slower,	including the number line, and use the language of: equal to, more than, less than	Compare, describe and solve practical problems for time [for example, quicker, slower,	including the number line, and use the language of: equal to, more than, less
	equal to, more than, less than (fewer), most, least	Count, read and write numbers to 20 in numerals	earlier, later] Measure and begin to record time (hours, minutes,	(fewer), most, least Count in multiples of twos,	earlier, later] Measure and begin to record time (hours, minutes,	than, most, least
	Number: Addition and Subtraction (within 10)	and words Given a number, identify one	seconds)	fives and tens	seconds)	Geometry: Shape Repeat
	Represent and use number bonds and related subtraction	more and one less	<u>Number: Addition and</u> Subtraction (within 20)	<u>Measurement: Length and</u> <u>Height (also taught in</u> Science)	Measurement: Money Recognise and know the value of different	Recognise and name common 2-D shapes, including:
	facts within 10	Identify and represent numbers using objects and pictorial representations	Represent and use number bonds and related subtraction	Measure and begin to record lengths and heights	denominations of coins and notes	rectangles (including squares), circles and triangles
	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equal (=) signs	including the number line, and use the language of: equal to, more than, less than (fewer), most, least	facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs	Describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half)	<u>Number: Fractions repeat</u> Recognise, find and name a half as one of two equal parts	Recognise and name common 3-D shapes including: cuboids (including cubes), pyramids and spheres



Add and St	ubtract one digit	Measurement: Money		Number: Multiplication and	of an object, shape or	Measurement: Length and
	•	Recognise and know the	Add and subtract one-digit	Division (Including multiples	quantity	Height Repeat
		value of different	and two-digit numbers to 20,	of 2, 5 and 10)		
Solve one	step problems that	denominations of coins and	including zero		Recognise, find and name a	Measure and begin to record
involve add		notes		Count in multiples of twos,	quarter as one of four equal	lengths and heights
			Solve one step problems that	fives and tens.	parts of an object, shape or	
		Number: Addition and	involve addition and		quantity.	Compare, describe and solve
objects and	•	Subtraction (within 10)	subtraction, using concrete	Solve one step problems		practical problems for:
representa	ations and missing	Repeat	objects and pictorial	involving multiplication and	Compare, describe and solve	lengths and heights (for
number pr	oblems		representations, and missing	division, by calculating the	practical problems for:	example, long/short,
		Represent and use number	number problems such as 7 =	answer using concrete	lengths and heights (for	
		bonds and related subtraction	9	objects, pictorial	example, long/short,	longer/shorter, tall/short,
		facts within 10		representations and arrays	longer/shorter, tall/short,	double/half)
			Number: Fractions	with the support of the	double/half) Compare,	
		Read, write and interpret		teacher	describe and solve practical	Measurement: Weight and
		mathematical statements	Recognise, find and name a		problems for: mass/weight	Volume (also taught in
		involving addition (+),	half as one of two equal parts	Number: Fractions	[for example,heavy/light,	Science) Repeat
		subtraction (-) and equal (=)	of an object, shape or		heavier than, lighter than];	
		signs	quantity	Recognise, find and name a	capacity and volume [for	Measure and begin to record
			Descention find and some a	half as one of two equal parts	example, full/empty, more	mass/weight, capacity and
		Add and subtract one digit	Recognise, find and name a quarter as one of four equal	of an object, shape or	than, less than, half, half full,	volume
		numbers to 10, including 0	parts of an object, shape or	quantity	quarter]	Compare, describe and solve
			quantity.	Recognise, find and name a	Measurement: Weight and	practical problems for
		Solve one step problems that	quantity.	quarter as one of four equal	Volume (also taught in	mass/weight: [for example,
		involve addition and	Compare, describe and solve	parts of an object, shape or	Science)	heavy/light, heavier than,
		subtraction using concrete	practical problems for:	quantity.	Measure and begin to record	lighter than]; capacity and
		objects and pictorial	lengths and heights (for	quantity.	mass/weight, capacity and	• • • •
		representations and missing	example, long/short,	Compare, describe and solve	volume	volume [for example,
		number problems	longer/shorter, tall/short,	practical problems for:	Compare, describe and solve	full/empty, more than, less
		•	double/half) Compare,	lengths and heights (for	practical problems for	than, half, half full, quarter]
		Number: Multiplication and	describe and solve practical	example, long/short,	mass/weight: [for example,	
		Division (Including multiples	problems for: mass/weight	longer/shorter, tall/short,	heavy/light, heavier than,	
		of 2, 5 and 10)	[for example,heavy/light,	double/half) Compare,	lighter than]; capacity and	
			heavier than, lighter than];	describe and solve practical	volume [for example,	Number: Fractions Repeat
		Count in multiples of twos,	capacity and volume [for	problems for: mass/weight	full/empty, more than, less	
		fives and tens.	example, full/empty, more	[for example, heavy/light,	than, half, half full, quarter]	Recognise, find and name a
			than, less than, half, half full,	heavier than, lighter than];		half as one of two equal parts
		Solve one step problems	quarter]	capacity and volume [for	Number: Multiplication and	of an object, shape or
		involving multiplication and		example, full/empty, more	Division (Including multiples	quantity
		division, by calculating the		than, less than, half, half full,	of 2, 5 and 10)	
		answer using concrete		quarter]	<u>Repeat</u>	



objects, pictorial representations and arrays with the support of the teacher	Number: Place Value (within50) Including multiples of 2, 5and 10Count to 50 forwards andbackwards, beginning with 0or 1, or from any numberCount, read and writenumbers to 50 in numeralsGiven a number, identify one	Number: Addition and Subtraction (within 20) Repeat Represent and use number bonds and related subtraction facts within 20 Read, write and interpret	Count in multiples of twos, fives and tens. 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	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. Compare, describe and solve practical problems for: lengths and heights (for example, long/short, longer/shorter, tall/short, double/half) Compare, describe and solve practical
	including the number line, and use the language of: equal to, more than, less than (fewer), most, least Count in multiples of twos, fives and tens	Add and subtract one-digit and two-digit numbers to 20, including zero Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = $\Box -9$ <u>Geometry: Position and</u> <u>Direction</u> Describe position, direction and movement, including whole, half, quarter and three quarter turns	Count to 50 forwards and backwards, beginning with 0 or 1, or from ny number Count, read and write numbers to 50 in numerals. Given a number, identify one more or one less Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least Count in multiples of twos, fives and tens	than, less than, half, half full, quarter]



	Measurement: Time (taught in basic skills)
	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening)
	Recognise and use language relating to dates, including days of the week, weeks, months and years
Objectives	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times
taught in	Compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]
other	Measure and begin to record time (hours, minutes, seconds)
curriculum	
21020	Measurement: Money (taught in basic skills)
areas	Recognise and know the value of different denominations of coins and notes
	other

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 2	Number: Place Value Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations, including the number line	Number: Addition and Subtraction Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: A two-digit number and ones A two-digit 	Measurement: Time (taught daily) 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. Compare and sequence intervals of time. Number: Place Value (repeat) Count in steps of 2, 3, and 5	Geometry: Position and Direction 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 anti-clockwise) Order and arrange combinations of mathematical objects in patterns and sequences	TAF statement evidence gatheringNumber: Fractions repeatRecognise, 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 quantityWrite simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$	TAF statement evidence gatheringMeasurement: Time (taught daily)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.Compare and sequence intervals of time.
	Compare and order numbers from 0 up to 100; use <, > and = signs	number and tens	from 0, and in tens from any number, forward and backward		2	<u>Statistics repeat</u> Interpret and construct simple pictograms, tally



Read and write numbers to at least 100 in numerals and in wordsUse place value number facts to solve problemsNumber: Addition and SubtractionRecall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: A two-digit number and onesA two-digit number and tensTwo two-digit numbersAdding three one- digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	 Two two-digit numbers <u>Adding</u> three one- digit numbers <u>Adding</u> three one- digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot EXS TAF: Add and subtract any two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17) EXS TAF: Recall all number bonds to and within 10 and use these to reason with a calculate bonds to and within 20, recognising other associated additive relationships (e.g. if 7 + 3 = 109, then 17 + 3 = 20, if 7 – 3 = 4, then 17 – 3 = 14; leading to if 14 + 3 = 17, then 3 + 14 = 17, 17 – 14 = 3 and 17 – 3 = 14) GD TAF: Use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. 29 + 17 = 15 + 4 + ?; 'together Jack and Sam have £14. Jack has £2 more than 	Recognise the place value of each digit in a two-digit number (tens, ones) Read and write numbers to at least 100 in numerals and in words <u>Measurement: Length and</u> <u>Height (also taught in</u> <u>Science)</u> Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers Compare and order lengths, mass, volume/capacity and record the results using >, < and = EXS TAF: Read scales in divisions of ones, twos, fives and tens (in the form of a number line of a practical measuring situation) GD TAF: Read scales where not all numbers on the scale are given and estimate points in between <u>Number: Division</u> Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables,	Number: FractionsRecognise, 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 quantityWrite simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ EXS TAF: Identify $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a number or shape, and know that all parts must be equal parts of the wholeMeasurement (also taught in Science)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 vesselsCompare and order lengths, mass, volume/capacity and record the recent ture using a compare ture using a compare and order lengths, mass, volume/capacity and record the recent ture using a compare and order lengths, mass, mass, volume/capacity using a record the recent ture using a compare and order lengths, mass	EXS TAF: Identify $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a number or shape, and know that all parts must be equal parts of the whole <u>Measurement: Time (taught</u> <u>daily) repeat</u> 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. Compare and sequence intervals of time. <u>Measurement: Money repeat</u> 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 change <u>Number: Addition and</u> Subtraction (repeat) Recall and use addition and	charts, block diagrams and simple tables Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totalling and comparing categorical data <u>Number: Addition and</u> subtraction repeat Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • A two-digit number and ones • A two-digit numbers • Two two-digit numbers • Adding three one- digit numbers • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number
	'together Jack and Sam have	and division facts for the 2, 5	Compare and order lengths,		numbers can be done in any



verbally, in pictures or using apparatus (e.g. $48 + 35$; $72 - 17$) EXS TAF: Recall all number bonds to and within 10 and use these to reason with a calculate bonds to and within 20, recognising other associated additive relationships (e.g. if $7 + 3 = 109$, then $17 + 3 = 20$, if $7 - 3 = 4$, then $17 - 3 = 14$; leading to if $14 + 3 = 17$, then $3 + 14 = 17$, $17 - 14 = 3$ and $17 - 3 = 14$) GD TAF: Use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. $29 + 17 = 15 + 4 + ?$; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc.) CD TAF: Calve refamilien	more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?') 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 Ask and answer questions about totalling and comparing categorical data Number: <u>Multiplication</u> Recall and use multiplication	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot EXS TAF: Recall multiplication and division facts for 2, 5 and	and tens (in the form of a number line of a practical measuring situation) GD TAF: Read scales where not all numbers on the scale are given and estimate points in between <u>Number: Addition and Subtraction (repeat)</u> 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	fluently, and derive and use related facts up to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • A two-digit number and ones • A two-digit number and tens • Two two-digit numbers • Adding three one- digit numbers • Adding three one- digit numbers • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	
to if $14 + 3 = 17$, then $3 + 14 = 17$, $17 - 14 = 3$ and $17 - 3 = 14$) GD TAF: Use reasoning about numbers and relationships to solve more complex problems and explain their thinking (e.g. $29 + 17 = 15 + 4 + ?$; 'together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc.)	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 Number: <u>Multiplication</u> Recall and use multiplication	methods, and multiplication and division facts, including problems in contexts Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot EXS TAF: Recall multiplication and division facts for 2, 5 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	 Two two-digit numbers <u>Adding</u> three one- digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number 	
GD TAF: Solve unfamiliar word problems that involve more than one step (e.g. 'which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?')	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	10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary GD TAF: Recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known	 A two-digit number and tens Two two-digit numbers <u>Adding</u> three one- digit numbers 	Multiplication and Division (repeat) Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	
	write them using the multiplication (x), division (÷) and equals (=) signs	multiplication facts Number: Fractions	t addition of two numbers can be done in any order (commutative) and	Calculate mathematical statements for multiplication and division within the	
	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication	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	subtraction of one number from another cannot <u>Multiplication (</u> repeat)	multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs	



and division facts, include	•	Recall and use multiplication	Solve problems involving	
problems in contexts	Write simple fractions for	and division facts for the 2, 5	multiplication and division,	
	example, $\frac{1}{2}$ of 6 = 3 and	and 10 multiplication tables,	using materials, arrays,	
Show that multiplication	101 2	including recognising odd and	repeated addition, mental	
two numbers can be do	3 1 4	even numbers	methods, and multiplication	
any order (commutative	' and -		and division facts, including	
division of one number	by ²	Calculate mathematical	problems in contexts	
another cannot		statements for multiplication		
	EXS TAF: Identify $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and	and division within the	Show that multiplication of	
EXS TAF: Recall multipli		multiplication tables and	two numbers can be done in	
and division facts for 2,	5 and $\frac{3}{4}$ of a number or shape, and	write them using the	any order (commutative) and	
10 and use them to solv	e know that all parts must be	multiplication (x), division (÷)	division of one number by	
simple problems,	equal parts of the whole	and equals (=) signs	another cannot	
demonstrating an				
understanding of		Solve problems involving		
commutativity as neces	sary	multiplication and division,		
GD TAF: Recall and use		using materials, arrays,		
multiplication and divisi	on	repeated addition, mental		
facts for 2, 5 and 10 and	l make	methods, and multiplication		
deductions outside know	wn	and division facts, including		
multiplication facts		problems in contexts		
Measurement: Money		Show that multiplication of		
Recognise and use symb	pols	two numbers can be done in		
for pounds (£) and pend		any order (commutative) and		
combine amounts to ma	ake a	division of one number by		
particular value		another cannot		
Find different combinat	ions			
of coins that equal the s	ame	Number: <u>Division (</u> repeat)		
amounts of money				
Solve simple problems i	na	Recall and use multiplication		
practical context involvi		and division facts for the 2, 5		
addition and subtraction	-	and 10 multiplication tables,		
money of the same unit		including recognising odd and		
including giving change		even numbers		
		Calculate mathematical		
Geometry: Properties o	f	statements for multiplication		
Shapes	-	and division within the		
		multiplication tables and		
Identify and describe th	e	write them using the		
properties of 2-D shape				
	-,		1	



including the number of sides	multiplication (x), division (÷)
and line symmetry in a	and equals (=) signs
vertical line	
	Solve problems involving
Identify and describe the	multiplication and division,
properties of 3-D shapes,	using materials, arrays,
including the number of	repeated addition, mental
edges, vertices and faces	methods, and multiplication
	and division facts, including
Identify 2-D shapes on the	problems in contexts
surface of 3-D shapes (for	
example, a circle on a cylinder	Show that multiplication of
face and a triangle on a	two numbers can be done in
pyramid)	any order (commutative) and
	division of one number by
Compare and sort common 2-	another cannot
D shapes and 3-D shapes and	
everyday objects	Geometry: Properties of
, - ,,	Shapes repeat
EXS TAF: Name and describe	
properties of 2-D and 3-D	Identify and describe the
shapes, including number of	properties of 2-D shapes,
sides, vertices, edges, faces	including the number of sides
and lines of symmetry	and line symmetry in a
GD TAF: Describe similarities	vertical line
and differences of 2-D and 3-	
D shapes, using their	Identify and describe the
properties (e.g. that two	properties of 3-D shapes,
different 2-D shapes both	including the number of
have only one line symmetry;	edges, vertices and faces
that a cube and a cuboid have	
the same number of edges,	Identify 2-D shapes on the
faces and vertices, but	surface of 3-D shapes (for
different dimensions).	example, a circle on a cylinder
uncrent unicipitity.	face and a triangle on a
	pyramid)
	pyramu)
	Compare and sort common 2-
	D shapes and 3-D shapes and
	everyday objects



		EXS TAF: Name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry GD TAF: Describe similarities and differences of 2-D and 3- D shapes, using their properties (e.g. that two different 2-D shapes both	
		and differences of 2-D and 3-	
		D shapes, using their	
		properties (e.g. that two	
		different 2-D shapes both	
		have only one line symmetry;	
		that a cube and a cuboid have	
		the same number of edges,	
		faces and vertices, but	
		different dimensions).	



Objectives taught in other curriculum areasMeasurement: Money (taught in Basic Skills) 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 change Measurement: Time (taught daily) 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. Compare and sequence intervals of time.
Conjectives Find different combinations of coins that equal the same amounts of money taught in Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change other Measurement: Time (taught daily) 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.
Conjectives Find different combinations of coins that equal the same amounts of money taught in Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change other Measurement: Time (taught daily) 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.
taught in other Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change other Measurement: Time (taught daily) 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.
other Measurement: Time (taught daily) curriculum areas Measurement: Time (taught daily) 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.
curriculum areas Measurement: Time (taught daily) 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.
areasTell 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.
Know the number of minutes in an hour and the number of hours in a day.
Compare and sequence intervals of time.



	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 3	Number: Place Value within 1000 Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Recognise the place value of each digit in a three-digit number (hundreds, tens,	Number: Addition and Subtraction repeat Add and subtract mentally, including:	Measurement: Time Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24- hour clock. Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of	Geometry: Properties of Shape repeat Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn	Number: Fractions (repeat) 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 and use fractions as numbers: unit fractions	Geometry: Properties of Shape (repeat) Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn
	ones) Compare and order numbers up to 1000 Identify, represent and estimate numbers using different representations Read and write number up to	A three-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight Know the number of seconds in a minute and the number of days in each month, year and leap year	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.	and non-unit fractions with small denominators Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators Recognise and show, using	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
	1000 in numerals and in words Solve number problems and practical problems involving these ideas	Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place	Compare durations of events [for example to calculate the time taken by particular events or tasks]	Draw 2-D shapes and make 3- D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	diagrams, equivalent fractions with small denominators Compare and order unit fractions, and fractions with the same denominator	Draw 2-D shapes and make 3- D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
	Number: Addition and Subtraction Add and subtract mentally, including:	value, and more complex addition and subtraction <u>Number: Multiplication and</u> <u>Division</u> Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Subtraction repeat Add and subtract mentally, including: • A three-digit number and ones • A three-digit number and tens	Number: Addition and Subtraction (repeat) Add and subtract mentally, including:	Add and subtract fractions with the same denominator within one whole (for example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) Solve problems that involve all of the above	Statistics repeat 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



r					
 A three-digit 	Write and calculate	 A three-digit 	 A three-digit 	Number: Place Value within	presented in scaled bar charts
number and	mathematical statements for	number and	number and	<u>1000 (repeat)</u>	and pictograms and tables
hundreds	multiplication and division	hundreds	hundreds		
	using the multiplication tables				Number: Fractions (repeat)
Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	they know, including for two- digit numbers times one-digit numbers, using mental and progressing to formal written methods	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number Recognise the place value of	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
Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	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 Measurement: Money	Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex	each digit in a three-digit number (hundreds, tens, ones) Compare and order numbers up to 1000 Identify, represent and estimate numbers using	quantities by 10 Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Recognise, find and write fractions of a discrete set of objects: unit fractions and
<u>Geometry: Properties of</u> <u>Shape</u>	Add and subtract amounts of money to give change, using	Number: Fractions	addition and subtraction Number: Multiplication and	different representations Read and write number up to 1000 in numerals and in	non-unit fractions with small denominators
Recognise angles as a property of shape or a description of a turn.	both £ and p in practical contexts	Count up and down in tenths; recognise that tenths arise from dividing an object into	Division (repeat) Recall and use multiplication and division facts for the 3, 4	words Solve number problems and	Solve problems that involve all of the above Becognise and show using
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.	Statistics Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables	10 equal parts and in dividing one-digit numbers or quantities by 10 Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	and 8 multiplication tables Write and calculate mathematical statements for multiplication and division using the multiplication tables 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 multiplication and	Solve number problems and practical problems involving these ideas <u>Measurement: Length and</u> <u>Perimeter repeat</u> Measure the perimeter of simple 2-D shapes	Recognise and show, using diagrams, equivalent fractions with small denominators Compare and order unit fractions, and fractions with the same denominator Add and subtract fractions with the same denominator within one whole (for example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) Solve problems that involve all of the above



Draw 2-D shapes and make 3-	Measurement: Length and	Solve problems that involve	division, including positive	Number: Multiplication and
D shapes using modelling	<u>Perimeter</u>	all of the above	integer scaling problems, and	Division (repeat)
materials; recognise 3-D			correspondence problems in	
shapes in different	Measure the perimeter of	Recognise and show, using	which n objects are	Recall and use multiplication
orientations and describe	simple 2-D shapes	diagrams, equivalent fractions	connected to m objects	and division facts for the 3, 4
them		with small denominators		and 8 multiplication tables
	Number: Place Value within	Compare and order unit	Number: Fractions (repeat)	Write and calculate
	1000 (repeat)	fractions, and fractions with	Count up and down in tenths;	mathematical statements for
	Count from 0 in multiples of 4,	the same denominator	recognise that tenths arise	multiplication and division
	8, 50 and 100; find 10 or 100		from dividing an object into	using the multiplication tables
	more or less than a given	Add and subtract fractions	10 equal parts and in dividing	they know, including for two-
	number	with the same denominator	one-digit numbers or	digit numbers times one-digit
	hamber	within one whole (for	quantities by 10	numbers, using mental and
	Recognise the place value of	example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$)		progressing to formal written
	each digit in a three-digit	Solve problems that involve	Recognise and use fractions	methods
	number (hundreds, tens,	all of the above	as numbers: unit fractions	
	ones)		and non-unit fractions with	Solve problems, including
		Geometry: Properties of	small denominators	missing number problems, involving multiplication and
	Compare and order numbers	Shape repeat	Recognise, find and write	division, including positive
	up to 1000		fractions of a discrete set of	integer scaling problems, and
		Recognise angles as a	objects: unit fractions and	correspondence problems in
	Identify, represent and	property of shape or a description of a turn.	non-unit fractions with small	which n objects are
	estimate numbers using	description of a turn.	denominators	connected to m objects
	different representations	Identify right angles,		
	Read and write number up to	recognise that two right	Solve problems that involve	
	1000 in numerals and in	angles make a half-turn, three	all of the above	
	words	make three quarters of a turn	Development of the state	
		and four a complete turn;	Recognise and show, using	
	Solve number problems and	identify whether angles are	diagrams, equivalent fractions with small denominators	
	practical problems involving	greater than or less than a		
	these ideas	right angle.	Compare and order unit	
			fractions, and fractions with	
		Identify horizontal and	the same denominator	
		vertical lines and pairs of perpendicular and parallel		
		lines.	Add and subtract fractions	
		intes.	with the same denominator	
		Draw 2-D shapes and make 3-	within one whole (for	
		D shapes using modelling	example $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$)	
		materials; recognise 3-D	, , ,	



		shapes in different orientations and describe them Number: Multiplication and Division repeat 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 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 multiplication and division, including positive integer scaling problems, and	Solve problems that involve all of the above			
		division, including positive integer scaling problems, and correspondence problems in which n objects are connected to m objects				
	Measurement: Money (taught in Basic Skills)					
Objectives taught in	Add and subtract amounts of money to give change, using both	£ and p in practical contexts				
other curriculum areas	Measurement: Time (taught in Basic Skills) Tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12-hour and 24-hour clock.					
	Estimate and read time with increasing accuracy to the nearest r afternoon, noon and midnight	ninute; record and compare time in	terms of seconds, minutes and hou	urs; use vocabulary such as o'cloo	ck, a.m./p.m., morning,	



Know the number of 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]
Measurement: Mass and Capacity (taught in Science)
leasure, compare, add and subtract: length (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 4	Number: Place Value Count in multiples of 6, 7, 9, 25 and 1000 (6, 7, 9 to be covered in Multiplication and Division Autumn 2) Find 1000 more or less than a given number Count backwards through zero to include negative numbers Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones)	Number: Multiplication and Division Recall multiplication and division facts for multiplication tables up to 12 x 12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Recognise and use factor pairs and commutativity in mental calculations.	Geometry: Properties of Shape Identify acute and obtuse angles and compare and order angles up to two right angles by size Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identify lines of symmetry in 2-D shapes presented in different orientations	Number: DecimalsRecognise and write decimal equivalents of any number of tenths or hundredthsFind the effect of dividing a one or two-digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredthsSolve simple measure and money problems involving fractions and decimals to two decimal placesCompare numbers with the same number of decimal	Statistics repeat Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs Geometry: Properties of Shape repeat Identify acute and obtuse angles and compare and order angles up to two right angles by size	Number: Addition and Subtraction (repeat) Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation Solve addition and subtraction two-step problems in contexts,



Order and compare numbers	Multiply two-digit and three-	Complete a simple symmetric	places up to two decimal	Compare and classify	deciding which operations
beyond 1000	digit numbers by a one-digit	figure with respect to a	places	geometric shapes, including	and methods to use and why
	number using formal written	specific line of symmetry	De addestaate titeere	quadrilaterals and triangles,	
Identify, represent and estimate numbers using	layout.	Number: Frestiens	Round decimals with one	based on their properties and	Number: Fractions (repeat)
different representations	Solve problems involving	Number: Fractions	decimal place to the nearest whole number	sizes	Recognise and show, using
different representations	multiplying and adding,	Recognise and show, using	whole humber	Identify lines of symmetry in	diagrams, families of common
Round any number to the	including using the	diagrams, families of common	Recognise and write decimal	2-D shapes presented in	equivalent fractions.
nearest 10, 100 or 1000	distributive law to multiply	equivalent fractions		different orientations	equivalent nactions.
	two digit numbers by one		equivalents to $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}$		Count up and down in
Solve number and practical	digit, integer scaling problems	Count up and down in		Complete a simple symmetric	hundredths; recognise that
problems that involve all of	and harder correspondence	hundredths; recognise that	Find the effect of dividing a	figure with respect to a	hundredths arise when
the above and with	problems such as n objects	hundredths arise when	one or two-digit number by	specific line of symmetry	dividing an object by one
increasingly large positive	connected to m objects	dividing an object by one	10 or 100, identifying the		hundred and dividing tenths
numbers		hundred and dividing tenths	value of the digits in the	Geometry: Position and	by ten.
	Statistics	by ten	answer as ones, tenths and	Direction	
Read Roman numerals to 100	Interpret and present discrete		hundredths		Solve problems involving
(I to C) and know that over	and continuous data using	Solve problems involving	Measurement: Time	Describe positions on a 2-D	increasingly harder fractions
time, the numeral system	appropriate graphical	increasingly harder fractions	(taughtin Basic Skills)	grid as coordinates in the first	to calculate quantities, and
changed to include the	methods, including bar charts	to calculate quantities, and	Read, write and convert time	quadrant	fractions to divide quantities,
concept of zero and place	and time graphs	fractions to divide quantities,	between analogue and digital		including non-unit fractions
value	Solve comparison, sum and	including non-unit fractions where the answer is a whole	12and 24-hour clocks	Plot specified points and draw	where the answer is a whole
Number: Addition and	difference problems using information presented in bar	number	Solve problems involving	sides to complete a given polygon	number
Subtraction	charts, pictograms, tables and	number	converting from hours to	polygon	Add and subtract fractions
Subtraction	other graphs	Add and subtract fractions	minutes; minutes to seconds;	Describe movements	with the same denominator.
Add and subtract numbers		with the same denominator	years to months; weeks to	between positions as	
with up to 4 digits using the			days	translations of a given unit to	Geometry: Properties of
formal written methods of	Measurement: Money	Measurement: Length and		the left/ right and up/ down	Shape (repeat)
	(taught in Basic Skills)	<u>Perimeter</u>	Geometry: Position and		
columnar addition and	Estimate, compare and		Direction	Number: Addition and	Identify acute and obtuse
subtraction where	calculate different measures,	Measure and calculate the		Subtraction repeat	angles and compare and
appropriate	including money in pounds	perimeter of a rectilinear	Describe positions on a 2-D grid as coordinates in the first		order angles up to two right
	and pence	figure (including squares) in	quadrant	Add and subtract numbers	angles by size
Estimate and use inverse	Solve simple measure and	centimetres and metres	quadrant	with up to 4 digits using the	
operations to check answers	money problems involving fractions and decimals to two	Convert botwoon different	Plot specified points and draw	formal written methods of	Compare and classify
to a calculation		Convert between different units of measure (for	sides to complete a given	columnar addition and	geometric shapes, including quadrilaterals and triangles,
	decimal places	example, kilometre to metre)	polygon	subtraction where	based on their properties and
Solve addition and		example, knometre to metre)		appropriate	sizes
subtraction two-step			Describe movements	- FF - F	0.200



deciding which operations			Estimate and use income	
с .		translations of a given unit to	Estimate and use inverse	Identify lines of symmetry in
and methods to use and why	Find the area of rectilinear	the left/ right and up/ down	operations to check answers	2-D shapes presented in
	shapes by counting squares		to a calculation	different orientations
	Number: Place Value (repeat)	Number: Multiplication and	Solve addition and	Complete a simple symmetric
		Division (repeat)	subtraction two-step	figure with respect to a
	Count in multiples of 6, 7, 9,		problems in contexts,	specific line of symmetry
	25 and 1000	Recall multiplication and	deciding which operations	
		division facts for	and methods to use and why	Number: Decimals repeat
	Find 1000 more or less than a	multiplication tables up to 12	and methods to use and why	
	given number	x 12	Number: Place Value repeat	Recognise and write decimal
				equivalents of any number of
	Count backwards through	Use place value, known and	Count in multiples of 6, 7, 9,	tenths or hundredths
	zero to include negative	derived facts to multiply and	25 and 1000 (6, 7, 9 to be	
	numbers	divide mentally, including:	covered in Multiplication and	Find the effect of dividing a
		multiplying by 0 and 1;	Division Autumn 2)	one or two-digit number by
	Recognise the place value of	dividing by 1; multiplying	,	10 or 100, identifying the
	each digit in a four-digit	together three numbers	Find 1000 more or less than a	value of the digits in the
	number (thousands,		given number	answer as ones, tenths and
	hundreds, tens and ones)	Recognise and use factor	8	hundredths
	O de se de se	pairs and commutativity in	Count backwards through	
	Order and compare numbers	mental calculations.	zero to include negative	Solve simple measure and
	beyond 1000		numbers	money problems involving
	Identify represent and			
		· · ·	Recognise the place value of	decimal places
	5	Ŭ	each digit in a four-digit	Convert botween different
	amerent representations	layout.	number (thousands,	
	Bound any number to the	Solvo problems involving	hundreds, tens and ones)	
				example, knometre to metrej
	ilearest 10, 100 01 1000	1700	Order and compare numbers	
	Solve number and practical	5 5	beyond 1000	Compare numbers with the
		5 ,	Identify, represent and	
			estimate numbers using	
			different representations	places
	numbers			Round decimals with one
	Read Roman numerals to 100	connected to m objects	Round any number to the	
			nearest 10, 100 or 1000	
				whole fulliber
			Solve number and practical	
			problems that involve all of	
	Identify, represent and estimate numbers using different representations Round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above and with increasingly large positive numbers Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the	Multiply two-digit and three- digit numbers by a one-digit number using formal written layout. 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 connected to m objects	Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones) Order and compare numbers beyond 1000 Identify, represent and estimate numbers using different representations Round any number to the nearest 10, 100 or 1000 Solve number and practical	fractions and decimals to the decimal places Convert between different units of measure [for example, kilometre to measure] Compare numbers with the same number of decimal places up to two decimal places Round decimals with one decimal place to the neared whole number



	concept of zero and place	the above and with	Recognise and write decimal
	value	increasingly large posit numbers	0
		Read Roman numerals (I to C) and know that of time, the numeral syste changed to include the concept of zero and play value	over one or two-digit number by 2000 100, identifying the 2010 value of the digits in the
		Number: Multiplication Division (repeat) Recall multiplication ar division facts for multiplication tables up x 12	between analogue and digital 12and 24-hour clocks Solve problems involving converting from hours to
		Use place value, known derived facts to multipl divide mentally, includi multiplying by 0 and 1; dividing by 1; multiplyin together three number	y and ng: Estimate, compare and calculate different measures, including money in pounds and pence Solve simple measure and
		Recognise and use fact pairs and commutativit mental calculations.	
		Multiply two-digit and digit numbers by a one number using formal w layout.	-digit
		Solve problems involvin multiplying and adding including using the distributive law to mult two digit numbers by o digit, integer scaling pr	; ;iply ne



		and harder correspondence problems such as n objects connected to m objects	
		<u>Measurement: Length and</u> <u>Perimeter repeat</u>	
		Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	
		Convert between different units of measure (for example, kilometre to metre)	
		Measurement: Area repeat	
		Find the area of rectilinear shapes by counting squares	

Objectives taught in other curriculum areas	Measurement: Time (taughtin Basic Skills) Read, write and convert time between analogue and digital 12and 24-hour clocks Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days Measurement: Money (taught in Basic Skills) Estimate, compare and calculate different measures, including money in pounds and pence Solve simple measure and money problems involving fractions and decimals to two decimal places
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	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	Number: Place Value	Number: Multiplication and	Place Value (repeat)	<u>Statistics</u>	Number: Multiplication and	Place Value (repeat)
		<u>Division</u>			Division	
	Read, write, order and		Read, write, order and	Solve comparison, sum and	(repeat)	Read, write, order and
	compare numbers to at least	Identify multiples and factors,	compare numbers to at least	difference problems using		compare numbers to at least
	1,000,000 and determine the	including finding all factor	1,000,000 and determine the	information presented in a	Multiply and divide numbers	1,000,000 and determine the
YEAR 5	value of each digit	pairs of a number, and	value of each digit	line graph	mentally drawing upon	value of each digit
		common factors of two		Complete, read and interpret	known facts	
	Count forwards and	numbers	Count forwards and	information in tables,		Count forwards and
	backwards in steps of powers		backwards in steps of powers	including timetables	Multiply numbers up to 4	backwards in steps of powers
	of 10 for any given number up	Know and use the vocabulary	of 10 for any given number up		digits by a one or two-digit	of 10 for any given number u
	to 1,000,000	of prime numbers, prime	to 1,000,000		number using a formal	to 1,000,000
		factors and composite (non-		Number: Multiplication and	written method, including	
	Interpret negative numbers in	prime) numbers	Interpret negative numbers in	Division (repeat)	long multiplication for 2-digit	Interpret negative numbers in
	context, count forwards and		context, count forwards and		numbers	context, count forwards and
	backwards with positive and	Establish whether a number	backwards with positive and	Identify multiples and factors,		backwards with positive and
	negative whole numbers,	up to 100 is prime and recall	negative whole numbers,	including finding all factor	Divide numbers up to 4 digits	negative whole numbers,
	including through zero	prime numbers up to 19	including through zero	pairs of a number, and	by a 1-digit number using the	including through zero
				common factors of two	formal written method of	
	Round any number up to	Multiply and divide numbers	Round any number up to	numbers	short division and interpret	Round any number up to
	1,000,000 to the nearest 10,	mentally drawing upon	1,000,000 to the nearest 10,		remainders appropriately for	1,000,000 to the nearest 10,
	100, 1000, 10000 and 100000	known facts	100, 1000, 10000 and 100000	Know and use the vocabulary	the context	100, 1000, 10000 and 100000
				of prime numbers, prime		
	Solve number problems and	Multiply and divide whole	Solve number problems and	factors and composite (non-	Solve problems involving	Solve number problems and
	practical problems that	numbers and those involving	practical problems that	prime) numbers	addition and subtraction,	practical problems that
	involve all of the above	decimals by 10, 100 and 1000	involve all of the above		multiplication and division	involve all of the above
		(also covered in decimals		Establish whether a number	and a combination of these,	
	Read Roman numerals to	block- Summer 1)	Read Roman numerals to	up to 100 is prime and recall	including understanding the	Read Roman numerals to
	1000 (M) and recognise years		1000 (M) and recognise years	prime numbers up to 19	use of the equals sign	1000 (M) and recognise years
	written in Roman numerals	Recognise and use square	written in Roman numerals			written in Roman numerals
		numbers and cube numbers,		Multiply and divide numbers	Number: Decimals	
	Number: Addition and	and the notation for squared	Number: Fractions	mentally drawing upon		Measurement (repeat)
	Subtraction	(2) and cubed (3)		known facts	Solve problems involving	
			Compare and order fractions		number up to three decimal	Measure and calculate the
	Add and subtract whole	Solve problems involving	whose denominators are	Multiply and divide whole	places	perimeter of composite
	numbers with more than 4	multiplication and division	multiples of the same number	numbers and those involving		rectilinear shapes in
		including using their		decimals by 10, 100 and 1000	Multiply and divide whole	centimetres and metres
	digits, including using formal	knowledge of factors and	Identify, name and write	(also covered in decimals	numbers and those involving	continieu es anu metres
		multiples, squares and cubes	equivalent fractions of a given	, block- Summer 1)	decimals by 10, 100 and 1000	



written methods (columnar		fraction, represented visually			Calculate and compare the
addition and subtraction)	Solve problems involving	including tenths and	Recognise and use square	Use all four operations to	area of rectangles (including
	multiplication and division,	hundredths	numbers and cube numbers,	solve problems involving	squares) and including using
Add and subtract numbers	including scaling by simple		and the notation for squared	measure [for example,	standard units, square
	fractions and problems	Recognise mixed numbers	(2) and cubed (3)	length, mass, volume, money]	centimetres (cm2) and square
mentally with increasingly	involving simple rates	and improper fractions and		using decimal notation,	metres (m2) and estimate the
large numbers	(covered in Fractions block	convert from one form to the	Solve problems involving	including scaling	area of irregular shapes
	Spring term)	other and write mathematical	multiplication and division		
Use rounding to check		statements >1 as a mixed	including using their	Geometry: Position and	Decimals (repeat)
answers to calculations and	Number: Multiplication and	number (for example $\frac{2}{5} + \frac{4}{5}$	knowledge of factors and	Direction repeat	
determine, in the context of a	Division	number (for example $\frac{-}{5}$ + $\frac{-}{5}$	multiples, squares and cubes		Solve problems involving
		$=\frac{6}{5}=1\frac{1}{5}$		Identify, describe and	number up to three decimal
problem, levels of accuracy	Multiply and divide numbers	$-\frac{1}{5}-\frac{1}{5}$	Solve problems involving	represent the position of a	places
	mentally drawing upon		multiplication and division,	shape following a reflection	
Solve addition and	known facts	Add and subtract fractions	including scaling by simple	or translation, using the	Multiply and divide whole
subtraction multi-step		with the same denominator	fractions and problems	appropriate language, and	numbers and those involving
problems in contexts,	Multiply numbers up to 4	and denominators that are	involving simple rates	know that the shape has not	decimals by 10, 100 and 1000
deciding which operations	digits by a one or two-digit	multiples of the same number		changed	-
and methods to use and why	number using a formal		Number: Decimals and	_	Use all four operations to
and methods to use and why	written method, including	Multiply proper fractions and	Percentages		solve problems involving
	long multiplication for 2-digit	mixed numbers by whole	rereentages	Fractions (repeat)	measure [for example,
	numbers	numbers, supported by	Read, write, order and		length, mass, volume, money]
		materials and diagrams	compare numbers with up to	Read, write, order and	using decimal notation,
	Divide numbers up to 4 digits		three decimal places	compare numbers with up to	including scaling
	by a 1-digit number using the	Read and write decimal	three decimal places	three decimal places	
	formal written method of	numbers as fractions [for	Recognise and use		
	short division and interpret	example $0.71 = \frac{71}{100}$]	thousandths and relate them	Recognise and use	Geometry: Properties of
	remainders appropriately for	100	to tenths, hundredths and	thousandths and relate them	Shape repeat
	the context		decimal equivalents	to tenths, hundredths and	
		Solve problems involving	accinial equivalents	decimal equivalents	Identify 3D shapes, including
	Solve problems involving	multiplication and division,	Round decimals with two		cubes and other cuboids,
	addition and subtraction,	including scaling by simple	decimal places to the nearest	Round decimals with two	from 2D representations
	multiplication and division	fractions and problems	whole number and to one	decimal places to the nearest	
	and a combination of these,	involving simple rates	decimal place	whole number and to one	Use the properties of
	including understanding the			decimal place	rectangles to deduce related
	use of the equals sign	Geometry: Position and	Solve problems involving		facts and find missing lengths
		<u>Direction</u>	number up to three decimal	Solve problems involving	and angles
	Measurement: Converting		places (also covered in next	number up to three decimal	0
	Units (taught in Science)	Identify, describe and	block)	places	Distinguish between regular
	Convert between different	represent the position of a			and irregular polygons based
	units of metric measure [for	shape following a reflection	Recognise the percent symbol	Recognise the percent symbol	on reasoning about equal
	example, km and m; cm and	or translation, using the	(%) and understand that per	(%) and understand that per	sides and angles
	example, km and m; cm and	or translation, using the	(%) and understand that per	(%) and understand that per	sides and angles



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	ı; cm and mm; g and kg; l	appropriate language, and	cent relates to 'number of	cent relates to 'number of	
	nd ml]	know that the shape has not	parts per hundred', and write	parts per hundred', and write	Know angles are measured in
Un	nderstand and use	changed	percentages as a fraction with	percentages as a fraction with	degrees: estimate and
ар	pproximate equivalences		denominator 100, and as a	denominator 100, and as a	compare acute, obtuse and
be	etween metric units and	Measurement: Volume	decimal	decimal	reflex angles
CO	ommon imperial units such	(taught in Science)			
as	s inches, pounds and pints	Estimate volume [for example	Solve problems which require	Solve problems which require	Draw given angles, and
So	olve problems involving	using 1cm3 blocks to build	knowing percentage and	knowing percentage and	measure them in degrees
co	onverting between units of	cuboids (including cubes)]	1 1	11	_
tin	me	and capacity [for example,	decimal equivalents of $\frac{1}{2}, \frac{1}{4}$,	decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{4}$	Identify:
		using water]	1 2 4	1 2 4	 angles at a point
De	ecimals	Use all four operations to	$\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions	$\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions	and one whole
Us	se all four operations to	solve problems involving	with a denominator of a	with a denominator	
	olve problems involving	measure (for example: length,	multiple of 10 or 25		turn (total 360°)
	neasure [for example,	mass, volume, money) using			 angles at a point
	ength, mass, volume,	decimal notation, including	Geometry: Properties of		on a straight line
	noney] using decimal	scaling)	Shape repeat		and ½ a turn (total
no	otation, including scaling				180°)
		Measurement: Perimeter	Identify 3D shapes, including		 other multiples of
		and Area	cubes and other cuboids,		90°
Ge	eometry: Properties of		from 2D representations		90
<u>Sh</u>	hape	Measure and calculate the			
		perimeter of composite	Use the properties of		Number: Addition and
Ide	lentify 3D shapes, including	rectilinear shapes in	rectangles to deduce related		Subtraction (repeat)
cu	ubes and other cuboids,	centimetres and metres	facts and find missing lengths		
fro	om 2D representations	centimetres and metres	and angles		Add and subtract whole
		Coloulate and compare the			numbers with more than 4
Us	se the properties of	Calculate and compare the area of rectangles (including	Distinguish between regular		digits, including using formal
rec	ectangles to deduce related	5, 5	and irregular polygons based		written methods (columnar
fac	icts and find missing lengths	squares) and including using	on reasoning about equal		•
an	nd angles	standard units, square	sides and angles		addition and subtraction)
	-	centimetres (cm2) and square	sides and angles		
Dis	istinguish between regular	metres (m2) and estimate the	Know angles are measured in		Add and subtract numbers
	nd irregular polygons based	area of irregular shapes	degrees: estimate and		mentally with increasingly
	n reasoning about equal		compare acute, obtuse and		large numbers
	des and angles		•		
			reflex angles		
Kn	now angles are measured in		Draw given angles and		Use rounding to check
	egrees: estimate and		Draw given angles, and		answers to calculations and
	ompare acute, obtuse and		measure them in degrees		determine, in the context of a
	eflex angles		I de actifica		problem, levels of accuracy
			Identify:		,



	Draw given angles, and measure them in degrees Identify: • angles at a point and one whole turn (total 360°) • angles at a point on a straight line and ½ a turn (total 180°) • other multiples of 90° <u>Number: Addition and Subtraction repeat</u> Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Add and subtract numbers mentally with increasingly large numbers Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	 angles at a point and one whole turn (total 360°) angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90° 	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why <u>Number: Multiplication and</u> <u>Division (repeat)</u> Multiply and divide numbers mentally drawing upon known facts Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for 2-digit numbers Divide numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign
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Objectives taught in other curriculum areas	Measurement: Converting Units (also taught in Science) Convert between different units of metric measure [for example, km and m; cm and m; cm and m; g and kg; l and ml] Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints Solve problems involving converting between units of time Measurement: Volume (also taught in Science) Estimate volume [for example using 1cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] Use all four operations to solve problems involving measure (for example: length, mass, volume, money) using decimal notation, including scaling)					
	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 6	Number: Place ValueRead, write, order and compare numbers up to 10,000,000 and determine the value of each digitRound any whole number to a required degree of accuracyUse negative numbers in context and calculate intervals across zeroSolve number and practical problems that involve all of the aboveNumber: Addition, Subtraction, Multiplication and DivisionMultiply multi-digit numbers up to 4 digits by a two-digit whole number using the 	Number: Addition, Subtraction, Multiplication and DivisionPerform mental calculations, including with mixed operations and large numbersIdentify common factors, common multiples and prime numbersUse their knowledge of the order of operations to carry out calculations involving the four operationsSolve addition and subtraction multi-step problems in contexts, deciding which operationsSolve problems involving and methods to use and whySolve problems involving addition, subtraction, multiplication and division	Geometry: Position and Direction 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 Statistics Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Interpret and construct pie charts and line graphs and use these to solve problems Calculate the mean as an average Number: Decimals	Number: 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 Measurement: Perimeter, Area and Volume Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes	Revision using gap analysis from Mock SATs SATs week	Consolidation, Problem Solving and Investigation
		Number: Fractions				



Divide numbers up to 4 digits		Identify the value of each	Calculate the area of	
by a two-digit whole number	Use common factors to	digit in numbers given to 3	parallelograms and triangles	
using the formal written	simplify fractions; use	decimal places and multiply		
method of long division, and	common multiples to express	numbers by 10, 100 and	Calculate, estimate and	
interpret remainders as	fractions in the same denomination	1,000 giving answers up to 3 decimal places	compare volume of cubes and cuboids using standard units,	
whole number remainders,	denomination	decimal places	including cm3, m3 and	
fractions or by rounding as	Compare and order fractions,	Multiply 1-digit numbers with	extending to other units	
appropriate to the context	including fractions > 1	up to 2 decimal places by	(mm3, km3)	
	5	whole numbers		
Divide numbers up to 4 digits	Add and subtract fractions		Number: Ratio	
by a two-digit number using	with different denominators	Use written division methods		
	and mixed numbers, using the	in cases where the answer	Solve problems involving the	
the <u>formal written method of</u>	concept of equivalent	has up to 2 decimal places	relative sizes of two	
short division where	fractions	.	quantities where missing	
appropriate, interpreting		Solve problems which require	values can be found by using	
remainders according to the	Multiply simple pairs of	answers to be rounded to	integer multiplication and	
context	proper fractions, writing the	specified degrees of accuracy	division facts	
	answer in its simplest form	Number Development	Calua analdana inualuina	
Use estimation to check	$(eg. \frac{1}{4} \times \frac{1}{2} = \frac{1}{8})$	Number: Percentages	Solve problems involving similar shapes where the	
answers to calculations and	4 2 8	Solve problems involving the	scale factor is known or can	
determine, in the context of a	Divide proper fractions by	calculation of percentages	be found	
problem, an appropriate		[for example, of measures		
degree of accuracy	whole numbers (eg. $\frac{1}{3} \div 2 =$	and such as 15% of 360] and	Solve problems involving	
	$\frac{1}{8}$)	the use of percentages for	unequal sharing and grouping	
	8′	comparison	using knowledge of fractions	
			and multiples	
	Associate a fraction with	Recall and use equivalences		
	division and calculate decimal	between simple fractions,		
	fraction equivalents (eg.	decimals and percentages		
	$0.375 = \frac{3}{8}$	including in different contexts		
	o			
	Recall and use equivalences			
	between simple fractions,			
	decimals and percentages,			
	including in different contexts			
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	Measurement: Converting Units			
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	ve problems involving the
calc	culation and conversion of
	its of measure, using
	cimal notation up to three
	cimal places where
	propriate
app	
	e, read, write and convert
	tween standard units,
	nverting measurements of
	gth, mass, volume and
	ne from a smaller unit of
	asure to a larger unit, and
	e versa, using decimal
	tation to up to 3 decimal
plac	ces ces
	nvert between miles and
kilo	ometres and a second seco
Geo	ometry: Properties of
Sha	ape
Dra	aw 2-D shapes using given
	nensions and angles
Cor	mpare and classify
	ometric shapes based on
	ir properties and sizes and
	d unknown angles in any
	angles, quadrilaterals and
	gular polygons
legi	angi horkêdura
Poo	cognise angles where they
	et at a point, are on a
	aight line, or are vertically
	posite, and find missing
200	gles and the second s
ang	



	Recognise, describe and build simple 3-D shapes, including making nets
Objectives taught in	
taught in	
other	
curriculum	
areas	