Maths Long Term Plan

<u>Strands</u>

Number NPV

Geometry GPD GPS

Measurement MEA

Statistics STA

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	NPV Number and place value: numbers to 10 then 20 PRA Problem solving, reasoning and algebra: patterns MAS Mental addition and subtraction: of number pairs to 5 then 6	GPD Geometry: position and direction; reciting and ordering days of the week, time and position related vocabulary. MEA Measurement: comparing and measuring length, height and capacity NPV Number and place value: numbers to 20 and beginning to chant numbers to 100.	NPV Number and place value: count to 100 and compare and order numbers to 20 PRA Problem solving, reasoning and algebra: explore and identify patterns (line symmetry); create and extend repeating patterns; recognise and identify odd and even numbers and count in 2s from an even number	NPV Number and place value: compare and order numbers to 20; match a numeral to 20 with the same number of objects in a set; estimate numbers of objects and images; begin to understand that teen numbers are ten plus some more. MEA Measurement:	NPV Number and place value: count to 100; rehearse teen numbers; rehearse counting back from 20, reinforce the order of numbers to 20. GPS Geometry: properties of shapes: distinguish between solid (3D) shapes and flat (2D)	NPV Number and place value: count on and back to/from any number to 20; rehearse counting to 100; begin to cement in the patterns of numbers in the count and the special 'tens' numbers; introduction to counting in 10s to 100.

GPS Geometry: properties of shapes; 2D shapes (circles, triangles and rectangles including squares); revise the days of the week and begin to learn the months of the year and the seasons

MAS Mental addition and subtraction; count on and back from a given number and write numerals 1 to 10; one more and one less than a given number MAS Mental addition and subtraction; partition sets of ten objects and learn the number pairs to 10; begin to use the language 'add', 'more than', 'equals';

multiplication and division: practical activities and objects to double; introduction to halving

MMD Mental

GPS Geometry: properties of shapes; improve understanding of how time is measured (seconds, minutes, hours, days, months and years); recognise and identify common 3D shapes (cubes, spheres, cuboids, cones, pyramids and cylinders); start to describe the properties of these 3D shapes, including

explore lengths. heights and weights, learning to compare each of these, using direct comparison. understand the need for a baseline; learn to measure a length or height using a non-standard uniform unit; compare items of the same size but different weight using balances; measure these using uniform non-standard units.

MAS Mental addition and subtraction: rehearse comparing numbers to 10 and 20 and identifying the largest and smallest set; relate this to the numerals: rehearse ordering numbers to 10 and 20 using the pegged number line; identify the larger and the smaller of two numbers using position on the line as a guide. Then they move onto usina a

shapes; properties
of 2D shapes (sides
- straight or
curved), the number
of
corners/symmetry;
properties of 3D
shapes (slide/roll/
can do
both/stackable)

multiplication and division: double numbers to 5 and halve even

MMD Mental

and halve even numbers to 10 (practically); share objects between four.

PRA Problem solving, reasoning and algebra:

begin to learn to count in 2s, 5s and 10s and pattern of counting; sort numbers into odd and even numbers; MAS Mental addition and subtraction:

PRA Problem solving, reasoning and algebra

find one more and one less than numbers up to 20; count on 2, 3 or 4 from a hidden quantity (add by counting on); count back where the remaining quantity is hidden in order to encourage counting back; read and match number sentences to practical problems.

PRA Problem solving, reasoning and algebra

MEA Measurement: explore measures:

explore measures: lengths, weights and capacities, learning to compare each of these using direct comparison; the 2D shapes of 1-20 number track to revisit doubles and progressing to using say the next number their flat faces. uniform halves. and the number non-standard units before any number. to measure a length, **MEA** Measurement: They will relate this height, capacity or different coins have to one more and one **MEA** Measurement: weight; comparison different values (will less. They begin to of more than two revisit the days of buy more or less, are lengths using write addition and the week (knowledge worth more or less); subtraction sentences uniform and ordering); talk begin to match real to match one non-standard units. about measuring more/less. coins to amounts of time in different money; start to use ways; understand money to buy things, units (months, days, start to realise that MAS Mental addition weeks, hours, they can pay a given **GPD** Geometry: and subtraction: minutes and position and direction; amount using seconds); learn to partition five, six different revisiting the days of recognise o'clock and ten objects into combinations of coins. the week, reciting the times on analogue two groups in order names and ordering and digital clocks; to find all the pairs them and will use match to key events of numbers with language related to in daily routine and totals of 5, 6 and 10; time such as in stories matching additions 'yesterday', 'today' are recorded and and 'tomorrow'; begin read; count on 1, 2, 3 to recognise o'clock or 4 from any times on analogue and number to give digital clocks and totals up to 20; match these to key begin to count back events in daily routine 1, 2 or 3 from and in stories: use the numbers up to 20 language of position and direction, including 'left' and 'right'

and subtraction: partition numbers and find pairs of numbers that total the number; begin to learn bonds to 5, 6, 7, 8 and 10; start matching sets of objects to addition sentences and begin to see that addition is commutative, i.e. 5 + 3 is the same as 3 + 5; introduction to the subtraction sign, using knowledge of bonds (if appropriate for the class). MEA Measurement:
familiarisation with coins and money; begin to learn the value of coins; compare and order according to value; learn their names.

Year 1	

NPV MAS Counting and representing numbers

Focus on counting, ordering, comparing numbers to 20 and beyond.

MAS PRA MMD Addition and subtraction

Focus on number stories, for addition / subtraction facts, doubles and counting on / back 1.

GPS 2D shapes

Focus on identifying, naming and sorting according to different properties.

NPV MAS Place value and representing number reading, writing, ordering, comparing numbers to 20 and beyond. Adding and subtracting 1 or 10.

NPV Counting and representing numbers

Focus: on counting, ordering, comparing numbers to 20 and beyond.

PRA Addition and subtraction Focus: number stories, for addition / subtraction facts, doubles and counting on / back 1.

MMD MAS Addition and subtraction

Focus: on number stories, for addition / subtraction facts, doubles and counting on / back 1.

NPV MAS Place value and representing numbers Focus: on reading, writing, comparing, ordering numbers to 20 and beyond; adding / subtracting 1 or 10.

MEA Position and rection; length

Focus: comparing and measuring lengths with uniform units.

MAS; MMD Addition and subtraction; money Focus: counting on or back 1 / 2 / 3 and recognising coins.

NPV MEA Addition and subtraction; money Focus: counting on or back 1 / 2 / 3 and recognising coins, then finding totals.

NPV MAS Place value Focus: using a variety of images to embed an understanding of 2-digit numbers and place value, including finding 1 more / less.

MAS PRA; MMD: Number facts Focus: embedding a reliable recall of number facts, then using NPV MMD Numbers and counting; fractions Focus: counting, extending this skill to include counting in 2s, 5s, 10s and identifying patterns; counting is related to estimation and then to halves and quarters as equal

parts of a whole.

NPV MMD FRP:
Numbers and
counting; fractions
Focus: counting,
extending this skill to
include counting in 2s,
5s, 10s and
identifying patterns;
counting is related to
estimation and then
to halves and
quarters as equal
parts of a whole.

GPD Position and direction: Focus: establishing position and direction

NPV MAS PRA Place value Focus: consolidating understanding of 2-digit numbers, representing these in different ways, and partitioning into 10s and 1s.

subtraction Focus: revision of number facts and using these to solve additions and subtractions involving 1- and 2-digit numbers.

MAS Addition and

MAS Addition and subtraction Focus: revision of number facts and using these to solve additions and subtractions involving 1- and 2-digit numbers.

MEA Measures
Focus: weight and

NPV Place value
Focus: rehearsing
place value in 2-digit
numbers.

NPV MMD PRA; FRP Multiplication and division Focus: identifying patterns in multiples of 2, 5 and 10, and relating counting in 2s to doubling and halving.

MEA GPS shapes; GPD Time; measures; 2D shapes Focus: telling the time to the half hour; measuring lengths, and on repeating patterns using 2D shapes.

MAS Addition and subtraction Focus: using number facts to solve additions and subtractions involving 1- and 2-digit numbers.

addition and subtraction with concrete objects.	these to solve simple word problems. MAS Addition and subtraction Focus: using known number facts to add and subtract using unit patterns and other strategies. GPS MEA 3D shapes; time Focus: naming and identifying 3D shapes and their properties, and then on rehearsing days of the week and months of the year.	MAS MMD; PRANumber facts Focus: number facts, including doubles and halves, and the use of these in additions and subtractions to 20. MEA Time Focus: on units of time and telling the time to the nearest half hour, and on developing understanding of how long a minute, hour, day, week, etc. are. MAS Addition and subtraction Focus: addition and subtraction, specifically in relation to counting on and back, sometimes crossing 10. NPV MAS: Place	capacity, comparing and using uniform non-standard units to measure both. NPV MMD FRP MEA Fractions; money Focus: doubling and halving numbers, and recognising halves and quarters of shapes; and on recognising coins and solving money problems.	NPV MAS; MMD Place value; multiplication Focus: consolidating understanding of 2-digit numbers; and exploring patterns in multiples of 2, 5 and 10.
		value and money Focus: place value in 2-digit numbers and then in relation to money: £1s, 10s, 1ps; children find 1 / 10		

Year 2	NPV PRA Place value	NPV PRA MAS Place	NPV MAS Place value	more / less than any number. MAS PRA Number	NPV MAS Place	MAS NPV MEA PRA
	Focuses on place value in numbers 0-100 and different ways of representing, comparing and ordering these.	value; ordinal numbers Focus on developing a good understanding of place value, comparing and ordering numbers to 100, including	Focuses on understanding place value in numbers to 100 and beginning to use this to add and subtract 2-digit numbers.	facts; addition and subtraction Focus on revising, then using, bonds to 10 in addition (counting on, bridging 10), and subtraction (finding a	value Focus on place value, including adding and subtracting 2-digit numbers by counting on/back in 10s and 1s.	Addition and subtraction; money Focuses on mental addition and subtraction strategies, using number facts and
	MAS PRA Addition and subtraction Focus on learning and using addition and subtraction number facts, including bonds to 10, in simple and harder calculations.	ordinal numbers. MAS PRA Addition and subtraction Focuses on adding and subtracting smaller 2-digit numbers to and from larger ones.	MMD PRA Multiplication and division Focuses on 'clever counting' on the number line, and introduces the × sign for multiplication.	difference, extending to calculating change). MAS PRA; MEA Number facts; addition and subtraction Focus on revising, then using, bonds to	MAS PRA Addition and subtraction Focus on using number facts to solve additions and subtractions, including adding several numbers and	place value; and on using £.p notation and solving money problems. MMD PRA Multiplication and division Focuses on relating multiplication and
	GPS STA 2D shapes Focuses on identifying and classifying 2D shapes, using a variety of sorting devices. NPV PRA MAS Place value; ordinal	GPD MEA Position and direction; length Focuses on understanding the vocabulary associated with position and movement and then comparing and measuring lengths	MMD PRA Multiplication and division Focuses on 'clever counting' using arrays as well as number lines; division is introduced as the inverse of multiplication.	10 in addition (counting on, bridging 10), and subtraction (finding a difference, extending to calculating change). GPS STA 2D shapes Focuses on identifying	counting up using complements to the next multiple of 10 to find a difference. MAS Addition and subtraction Focus on using number facts to solve additions	division to 'clever counting' (steps of 2, 3, 5, 10), understanding multiplication as arrays, and solving divisions as missing number problems.
	numbers Focus on developing a good understanding of place	using cm and m.		and classifying 2D shapes, using a	and subtractions, including adding several numbers and	MEA Length; time Focuses on estimating and

value, comparing and	MAS PRA MMD	MMD FRP Fractions	variety of sorting	counting up using	measuring lengths in
	Addition and		devices.	, , ,	, ,
100, including ordinal	subtraction Focuses			next multiple of 10	the time to 5
value, comparing and ordering numbers to 100, including ordinal numbers.		MMD FRP Fractions Focuses on doubling and halving, including odd numbers, leading to counting in halves and mixed numbers; unit and non-unit fractions are then modelled using a variety of images. MEA STA Time; data Focuses on telling the time and further develops children's understanding of the units of time; time is then used as the context for data to be represented on pictograms and block graphs.	variety of sorting devices. GPS GGPD; MEA 3D shapes; time Focuses on identifying 3D shapes and their properties, including naming 2D faces; and then on rehearsing telling the time on analogue and digital clocks. NPV Place value Focuses on extending understanding of place value to include landmarked lines and estimation.	counting up using complements to the next multiple of 10 to find a difference. MEA STA Measures; statistics and data Focuses on using non-standard and standard units to measure and compare weights and capacities; and on using this context to revise the use of block graphs. MMD FRP Multiplication, division and fractions Focuses on doubling and halving	measuring lengths in cm; and on telling the time to 5 minutes. MAS MMD PRA Addition and subtraction; multiplication and division Focuses on adding by partitioning; finding differences; and on multiplying and dividing by counting in steps. NPV MAS Place value Focuses on revising place value in 2-digit numbers, and extending to place value in 3-digit
		MEA NPV PRA MAS Money and money calculations Focuses on rehearsing coin and note values, and on writing amounts of money; money is then used as the context for adding and finding totals.		as inverse operations, and relates division to fractions, including finding halves, quarters and thirds of amounts.	numbers.

Year 3	and subtraction Focus on revising the understanding and use of place value and Multiplication and division; fractions Focus on doubling a halving, and	Multiplication and division; fractions Focus on doubling and halving, and understanding a half and other unit	NPV; MAS PRA Place value Focus on embedding a thorough understanding of place value and properties of numbers.	NPV PRA WAS Addition and subtraction Focus on the way a secure understanding of place value underpins rounding, mental addition and subtraction, and	MAS PRA FRP Addition and subtraction Focus on securing understanding of addition and subtraction and rehearsing sound mental strategies,	WAS MAS Addition and subtraction Focus on mental and written addition and subtraction, including mental strategies, column addition, subtracting by counting up, and
	NPV MAS PRA Addition and subtraction Focus on revising the understanding and use	MEA PRA MAS Place value in addition and subtraction Focus on understanding place value and on using	MAS MMD STA PRA Addition; times tables Focus on using partitioning in addition; and on the 2, 3, 4, 5, 8 and 10 times	column methods of addition. MAS WAS PRA Addition and	extending to adding and subtracting fractions. MMD PRA WMD	choosing appropriate methods to solve problems. WAS MEA MAS PRA
	of place value and number facts in mental addition and	partitioning in adding and subtracting.	tables. FRP PRA Fractions	subtraction Focus on the way a secure understanding of	Multiplication and division Focus on developing understanding and	Addition and subtraction Focus on mental and written addition and
	MMD PRA Multiplication and division Focus on key multiplication and	MEA GPS Length; perimeter Focus on the SI units and measurement of length.	Focus on fractions as numbers, finding equivalent fractions, placing fractions on a line, and on fractions as operators, finding	place value underpins rounding, mental addition and subtraction, and column methods of addition.	skills in multiplication and division, including using tables facts to solve scaling problems,	subtraction, including mental strategies, column addition, subtracting by counting up, and choosing appropriate
	division facts and on doubling and halving. PRA MEA GPS STA	NPV; MAS PRA Place value; difference Focuses on using number lines to	fractions of amounts. GPS GPD MEA Angles; 2D shapes	MEA Time Focus on time-telling on digital and analogue clocks, and the calculation of	multiplications using the grid method, and divisions using chunking.	methods to solve problems. GPS MEA 2D
Time; 2D shapes; right angles Focus on	compare and round numbers and to find differences.	impare and round Focus on angles, including right angles,	time intervals; these are used in solving word problems.	MMD WMD Multiplication and	shapes; time Focus on developing understanding and	

identifying, describing and sorting 2D shapes.

NPV MAS PRA Place value; difference Focus on placing 2- and 3-digit numbers on a line and using an empty number line to find differences.

Buckstones Big Maths: The Bucket Puzzle (Find all possibilities) MMD PRA MAS
Revision Revision of
key calculation
strategies and their
use in word problems.

measurement of turn, and the ° symbol;

NPV MAS; GPS
Addition and
subtraction; 3D
shapes Focus on the
way a secure
understanding of
place value underpins
rounding, mental
addition and
subtraction, and
column methods of
addition.

NPV MAS PRA Place value; subtraction
Focus on using number lines to facilitate an understanding of place value in 3-digit numbers, and as an efficient method of performing subtraction involving 3-digit numbers.

MMD WMD PRA
Multiplication and
division Focus on
developing
multiplication
strategies using
doubling and halving
and standard method
calculations; division
is related to
multiplication and this
relationship is used to
solve missing number
problems.

division Focus on developing understanding and skills in multiplication and division, including using tables facts to solve scaling problems, multiplications using the grid method, and divisions using chunking.

STA PRA MEA
Statistics and
data; weight Focus
on drawing and
interpreting
pictograms and bar
graphs with
different scales,
and on using these
to record and
analyse data in the
context of
measuring weights.

MAS WAS PRA
Addition and
subtraction Focus on
mental and written
addition and
subtraction,

vocabulary of shape and angle, including measuring perimeters; and on telling the time 5, 10, 20 minutes later using am/pm and 24-hour clock.

DPE Multiplication and division; fractions Focus on consolidating written multiplication and division strategies, securing understanding of the relation between division and fractions, and moving to finding tenths of amounts.

WMD PRA MMD FRP

MAS WAS PRA
WMD MMD Revision
Focus on rehearsing
and consolidating
mental and written
calculation skills in
addition,
subtraction,
multiplication and
division.

					including mental strategies, column addition, subtracting by counting up, and choosing appropriate methods to solve problems. Buckstones Big Maths Treasure Island Challenge: Visual/logic puzzle Work systematically; work with spatial patterns and relationships; record results systematically; work with position and direction; recognise dead ends and work out how to proceed.	
Year 4	MAS PRA Addition and subtraction Focus on mental strategies in addition and subtraction, including the use of a robust understanding of place value.	MMD PRA FRP Fractions and decimals; addition Focus on fractions and decimals, and end by using place value in formal addition.	NPV PRA Place value; addition and subtraction Focuses on ensuring a robust understanding of place value and numbers to 10,000, including counting in equal steps; this understanding is then	DPE NPV PRA WAS Place value Focuses on ensuring a robust understanding of that place value in decimal numbers and Roman numerals.	NPV PRA Place value and decimals Focus on consolidating place value in 4- and 5-digit numbers, extending to decimals; including multiplying and dividing by 10 and	MAS MMD WMD PRA Addition and subtraction; multiplication and division Focuses on adding and subtracting 2-, 3- and 4- digit numbers; and on using knowledge of

NPV MAS Addition and subtraction Focus on mental strategies in addition and subtraction, including the use of a robust understanding of place value.

WAS Addition and subtraction Focuses on understanding and using formal written methods of addition.

MMD PRA WMD; FRP
Multiplication and
division Focus on
learning and using
multiplication and
division facts in solving
more advanced
problems.

WAS Addition and subtraction Focuses on understanding and using formal written methods of subtraction.

GPS PRA 2D shapes (Carried out over the

DPE NPV WAS; MAS Fractions and decimals; addition Focus on fractions and decimals, and end by using place value in formal addition.

NPV WAS MAS
Subtraction Focuses
on using place value to
underpin an
understanding of
different methods in
subtraction and to
choose between
these.

DPE MEA STA PRA Measures; data Focuses on using SI units in measuring, reading scales and collecting, interpreting and recording data.

MMD WMD PRA
Multiplication and
division Focuses on
developing a
knowledge and
understanding of

used to underpin mental addition and subtraction.

WAS MMD WMD PRA
MEA Subtraction;
multiplication Focuses
on written calculation
methods underpinned
by a secure
understanding of
place value: vertical
subtraction and
multiplication
methods, and
multiplication
problems involving
money.

MMD FRP PRA
Division: fractions
Focuses on mental
multiplication and
division strategies,
which underpin the
work on proper
fractions that follows,
including finding
non-unit fractions of
amounts, equivalent
fractions and
simplifying.

NPV Place value
Focuses on ensuring a
robust understanding
of that place value in
decimal numbers and
Roman numerals.

NPV MAS Addition and subtraction
Focuses on using understanding of place value to choose appropriate strategies when calculating with decimals or money; written methods then include larger whole numbers.

NPV WAS MAS
Subtraction Focuses
on using
understanding of
place value to solve
subtraction problems
using appropriate
methods.

WMD PRA MAS WAS Multiplication and division Focuses on developing a good 100, placing numbers (including negative) on lines, and adding and subtracting powers of 10.

MAS DPE Place value and decimals
Focus on consolidating place value in 4- and
5-digit numbers, extending to decimals; including multiplying and dividing by 10 and 100, placing numbers (including negative) on lines, and adding and subtracting powers of 10.

MMD PRA NPV;
WMD Multiplication
and division Focuses
on extending
knowledge of times
tables, using this to
develop
understanding of
harder written
multiplication
algorithms; and on
division as the

factors, products and doubling to solve multiplication problems mentally.

WAS PRA MAS
Addition and
subtraction Focuses
on addition and
subtraction using
written column
methods.

GPD STA Coordinate geometry; statistics and data Focuses on using coordinate grids; and developing that understanding to draw line graphs and know that intermediate points have meaning.

WMD PRA MMD FRP
DPE Multiplication
and division;
fractions Focus on
enhancing mental and
written strategies
for multiplication
and division; and link
this to unit and

half term) Focus on properties of 2D shapes, including angles, parallel and perpendicular lines, and symmetry.

multiplication and division to enable children to tackle harder problems.

MEA DPE GPS Time; Length; 2D shapes

(Carried out over the half term) Focus on telling the time, calculating time intervals and using m, cm and mm in the measurement of lengths.

MMD WMD MAS **PRAMental** calculation strategies Focuses on the relationship between the operations, particularly multiplication and division, and then

between addition and subtraction; these important inverse relationships are linked to mental

MEA DPE Measures: 2D and 3D shapes (Carried out over the half term) Properties of 2D and 3D shapes; convert between grams and kilograms.

calculation.

Year 4 Buckstones Big Maths Multiplication and division; addition and subtraction PS Race to 200 and Wonderful 1089.

understanding of the processes involved in more complex written algorithms for multiplication and division and extending times table knowledge.

MEA PRA Time; length (Carried out over the half term) Focuses on time-telling and the 24-hour clock, including calculating time intervals; the week ends with some practice in finding missing lengths in rectilinear shapes.

Year 4 Buckstones Big Maths

Roman Numerals Hidden Message Investigation (crack the code)

inverse of multiplication.

NPV MEA: GPS Area and perimeter

Focuses on calculating perimeters and areas of shapes.

DPE PRA FRP Fractions and decimals Focuses on developing and enhancing the concept of decimal number, including relating decimal fractions to proper fractions and recognising equivalents.

non-unit fractions and the decimal results of dividing by 10 and 100.

MMD PRA WMD FRP Multiplication and division; fractions Focus on enhancing mental and written strategies for multiplication and division; and link this to unit and non-unit fractions and the decimal results of dividing by 10 and 100.

Year 5	NPV WAS; PRA Number and Place Value; Addition and subtraction Focus on establishing a robust understanding of place value and using this in the development of addition and subtraction calculation strategies.Revise Roman Numerals to 100 (C). MAS NPV Addition and subtraction Focus on the rehearsal and development of mental calculation strategies for addition and subtraction.	MMD Multiplication and division Focus on multiplication and division, and extend children's understanding of multiples. MMD WMD PRA Multiplication and division; fractions Focus on multiplication and division, and extend children's understanding of fractions. NPV DPE FRP Whole numbers, decimals and fractions Focuses	NPV Number and Place Value Focus on Roman Numerals and introduce new Numerals up to 1000 (M). MEA Measures Begin to calculate the perimeter of composite rectilinear shapes. GPS PRA Angles Focuses on the concept of angles as degrees of 'turn', and on comparison, identification and measurement of angles.	NPV WAS PRA MEA Number and Place Value; Addition and subtraction Focus on mental addition and subtraction of powers of 10; column addition of decimal numbers, and on mental subtraction of decimal numbers. WMD FRP Multiplication and division Focus on the development of written methods for multiplication and division; division is linked to finding fractions of large amounts.	MAS DPE PRA Addition and subtraction Focus on adding and subtracting numbers in the context of money and contextual problems. FRP PRA WMD Fractions; multiplication Focus on multiplying and converting fractions; and on short and long multiplication of whole numbers. DPE PRA NPV Place value and decimals	NPV Addition and subtraction Focus on written methods of addition and subtraction, and choosing efficient strategies to solve problems. MMD PRA FRP Multiplication and division and fractions Focus on factors and multiples; on securing the concept of equivalent fractions to enable calculations with fractions; and on further developing written methods of
	DPE FRP PRA MMD Decimals and fractions; multiplication and division Focus on multiplying and dividing to get decimal	on comparing and ordering whole numbers and decimals, and on equivalence in relation to proper fractions and decimals.	NPV DPE PRA Place value Focus on developing a robust understanding of place value in larger whole numbers and in	WMD Multiplication and division Focus on the development of written methods for multiplication and division; division is linked to finding	Focus on place value in decimals, including multiplying and dividing by 10 and 100.	multiplication and division. WMD Multiplication and division and fractions Focus on

numbers, and then on mental strategies in multiplication and division.

MEA Time; length Focus on calculating time intervals and on measuring lengths in cm and mm.

WAS MAS
Subtraction Focus on using formal written subtraction and counting up as appropriate, including when finding change.

MEA Measures Focus on measuring in cm and mm and converting between units of measure.

MAS WAS; MMD
WMD PRA Revision of
the four operations,
including calculation
strategies and the
inverse relation
between addition and
subtraction,
multiplication and
division.

decimals; this is used to enable children to round any number to the nearest required power of ten.

MAS PRA WAS
Addition and
subtraction Focus on
the rehearsal and
development of
mental calculation
strategies for
addition and
subtraction.

MMD NPV PRA
Multiplication and
division Focus on the
rehearsal and
development of
mental calculation
strategies for
multiplication and
division, and on
identifying patterns
and rules.

PRA GPS MEA STA
2D shapes; measures
Focus on exploring the
properties of
triangles, naming and

fractions of large amounts.

GPS PRA; MEA 2D shapes; angles; measures Focus on developing understanding of polygons and angles, particularly in relation to quadrilaterals; metric units are then revised and regularly used; imperial units are introduced.

FRP PRA Fractions
Focus on revising
proper fractions and
equivalent fractions,
and then moves on to
mixed numbers and
improper fractions;
proper fractions are
multiplied by whole
numbers.

WAS PRA Addition and subtraction Focus on rehearsing column subtraction and extending to larger / more GPD PRA GPS
Coordinate
geometry; 2D and
3D shapes Focus on
plotting, reflecting
and translating
shapes on
coordinate grids;
and on extending
understanding of
properties of 2D
and 3D shapes.

WAS PRA Addition and subtraction
Focus on written methods of addition and subtraction, and choosing efficient strategies to solve problems.

perime Focus areas, and vo unders differ measure two and subtraction and vo unders differ measure two and subtractions.

factors and multiples; on securing the concept of equivalent fractions to enable calculations with fractions; and on further developing written methods of multiplication and division.

perimeter; volume Focus on calculating areas, perimeters and volumes, and understanding the difference between measurement in one, two and three dimensions.

PRA MEA Area and

DPE FRP NPV
Fractions, decimals
and percentages
Focus on
understanding
percentages and how
they relate to
fractions and
decimals, and solving
problems by finding

1	Т	T	T	
		identifying the	difficult numbers;	percentages of
		different types; and	column addition and	amounts.
		then on SI units of	subtraction are used	
		measure, reading	to solve problems.	NPV STA MEA
		scales and conversion		WMD PRA MMD
		problems.	Dualentana Dia	Revision Focus on
			Buckstones Big	· I
			Maths: investigate	revision of: line
			all possible	graphs; calculating
			perimeters and areas	time intervals;
			of rectangles	finding cubes of
			considering whether	numbers; using
			the size of the	factors to multiply;
			perimeter is always	and solving scaling
			bigger/smaller than the area.	problems involving fractions and
			The area.	· I
				measures.
				Buckstones Big
				Maths: Party
				planning: calculate
				the cost of a party
				using a budget. Try
				to get as close as
				possible to the
				budget.
				budger.
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Year 6	NPV MMD DPE FRP Place value; addition Focus on establishing a robust understanding of place value in relation to whole numbers and decimals, which is then used in written methods and mental strategies in addition.	NPV PRA FRP Negative numbers; fractions Focus on positive and negative whole numbers, and then comparing, ordering, adding and subtracting fractions, including mixed numbers.	MEA GPS Shape, and measurement in relation to shape Focus on 2D shapes, their properties, areas, and perimeters, and 3D shapes, their nets, volumes and properties. MEA PRA NPV	MAS WAS PRA Addition and subtraction Focuses on solving addition and subtraction problems involving money and decimals. STA DPE Statistics and data Focuses on data representation	NPV DPE Revision: place value and decimals Focus on revision of place value in large numbers and in decimal fractions. NPV MAS WAS DPE FRP PRA GPS Revision Focus on	NPV FRP MEA Revision: fractions; ratio Focuses on revision of: equivalence in fractions; and using this to add, subtract, multiply and divide fractions; and solving ratio problems.
	MAS NPV WAS DPE; PRA Place value; addition Focus on establishing a robust understanding of place value in relation to whole numbers and decimals, which is then used in written methods and mental strategies in addition.	NPV PRA FRP Negative numbers; fractions Focus on positive and negative whole numbers, and then comparing, ordering, adding and subtracting fractions, including mixed numbers. MMD FRP WMD PRA Division; fractions	Measures Focuses on measurement in and conversion of SI and imperial units; it also covers the use of 24-hour clock and calculation of time intervals NPV WAS Place value; subtraction Focus on a robust understanding of	and manipulation, including line graphs, pie charts and the use and calculation of averages. GPD NPV PRA GPSCoordinate geometry; angles Focus on position on a 4-quadrant coordinate grid, with polygons being	revision of: mental and written strategies in addition and subtraction; finding percentages; order of operations; and finding unknowns in equations. MAS FRP WMD MMD PRA NPV Revision:	GPS MEA STA Revision Focuses on revision of: properties of 2D shapes; angle types and theorems; perimeter, area and volume; 24-hour clock time intervals; and tables, graphs and charts.
	PRA MAS Algebra Focus on algebra - developing the use of trial and improvement methods, knowledge of	and percentages Focus on division and fractions; children rehearse mental strategies and short	place value in large numbers, which underpins the	plotted, translated and reflected; the week concludes with angle theorems.	multiplication and division Focus on revision of: written algorithms for multiplication and	NPV PRA GPD WMD Further mathematical ideas Focus of a variety of interesting

the order of operations including brackets, and the manipulation of sentences containing unknowns.

MAS WAS NPV PRA Subtraction Focus on mental strategies and written methods in subtracting and the appropriate use of both with whole and decimal numbers, including money.

MMD WMD MAS; PRA NPV Multiplication

Focus on mental strategies and written methods in multiplying; both long and short multiplication are rehearsed, alongside a range of mental tactics.

division, giving remainders as fractions; fractions are added, subtracted.

FRP PRA DPE Division; fractions and percentages Focus on division and fractions; children rehearse mental strategies and short division, giving remainders as fractions; fractions are added, subtracted.

FRP Division;
fractions and
percentages Focus on
division and fractions;
children rehearse
mental strategies and
short division, giving
remainders as
fractions; fractions
are added,
subtracted; finding
percentages is also
covered.

subtraction work that follows.

FRP PRA DPE Focus on mental strategies to find simple percentages of amounts, including money.

DPE FRP
Multiplication of
decimals and
fractions Focus on
understanding decimal
and proper fractions
and their
equivalences;
calculations including
multiplication of
these numbers are
rehearsed

MMD WMD PRA NPV
Multiplication of
decimals and
fractions Focus on
understanding decimal
and proper fractions
and their
equivalences;
calculations including
multiplication of

WMD PRA
Multiplication and
division Focus on the
use of written
algorithms in
multiplying and
dividing large
numbers; both long
and short versions of
these methods are
taught.

PRA FRP Algebra; ratio Focus on the use of generalizations and simple formulas, including to find the nth term in a sequence; then moves on to ratio

MEA GPS Shape, and measurement in relation to shape Focus on 2D shapes, their properties, areas, and perimeters. division and mental strategies including the use of factors; finding fractions of amounts; and calculating mean average.

WMD PRA NPV STA
GPD Revision:
multiplication and
division Focus on
revision of: written
algorithms for
multiplication and
division and mental
strategies including
the use of factors;
finding fractions of
amounts; and
calculating mean
average.

mathematical concepts and processes, including binary numbers and Napier's bones; playing with numbers, discovering patterns and solving mathematical puzzles.

NPV PRA GPS **Further** mathematical ideas Focus on exploration of a variety of interesting mathematical concepts and processes, including binary numbers and Napier's bones; playing with numbers, discovering patterns and solving mathematical puzzles.

GPS PRA 2D shapes; angles Focus on 2D shapes, particularly quadrilaterals, in relation to their diagonals and interior angles.	these numbers are rehearsed. GPS PRA 2D shapes; angles Focus on 2D shapes and interior angles; circles are also taught, along with relevant terminology. MAS NPV WAS PRA Addition and subtraction Focus on mental and written addition and subtraction methods, including solving word problems. WMD NPV PRA Multiplication and division Focus on number patterns involving factors and multiples, and on long division.		