Number and PV	+ -	х÷	Fractions, Decimals and %
- read, write, order and	- add and subtract	- identify multiples and factors, including finding all factor pairs of a	- compare and order fractions whose denominators are all multiples of the same
compare numbers to at least 1	whole numbers with	number, and common factors of two numbers	number
000 000 and determine the	more than 4 digits,	- know and use the vocabulary of prime numbers, prime factors and	- identify, name and write equivalent fractions of a given fraction, represented
value of each digit	including using formal	composite (nonprime) numbers	visually, including tenths and hundredths
- count forwards or backwards	written methods	- establish whether a number up to 100 is prime and recall prime	- recognise mixed numbers and improper fractions and convert from one form to
in steps of powers of 10 for any	- add and subtract	numbers up to 19	the other and write mathematical statements > 1 as a mixed number
given number up to 1 000 000	numbers mentally with	- multiply numbers up to 4 digits by a one- or two-digit number using	- add and subtract fractions with the same denominator and denominators that
- interpret negative numbers in	increasingly large	a formal written method, including long multiplication for two-digit	are multiples of the same number
context, count forwards and	numbers	numbers	- multiply proper fractions and mixed numbers by whole numbers, supported by
backwards with positive and	- use rounding to check	- multiply and divide numbers mentally drawing upon known facts	materials and diagrams
negative whole numbers,	answers to calculations	- divide numbers up to 4 digits by a one-digit number using the formal	- read and write decimal numbers as fractions
including through zero	and determine, in the	written method of short division and interpret remainders	- recognise and use thousandths and relate them to tenths, hundredths and
- round any number up to 1	context of a problem,	appropriately for the context	decimal equivalents
000 000 to the nearest 10,	levels of accuracy	- multiply and divide whole numbers and those involving decimals by	- round decimals with two decimal places to the nearest whole number and to
100, 1000, 10 000 and 100	- solve addition and	10, 100 and 1000	one decimal place
000	subtraction multi-step	- recognise and use square numbers and cube numbers, and the	- read, write, order and compare numbers with up to three decimal places
- solve number problems and	problems in contexts,	notation for squared (2) and cubed (3)	- solve problems involving number up to three decimal places
practical problems that involve	deciding which	- solve problems involving multiplication and division including using	- recognise the per cent symbol (%) and understand that per cent relates to
all of the above	operations and methods	their knowledge of factors and multiples, squares and cubes	'number of parts per hundred', and write percentages as a fraction with
- read Roman numerals to	to use and why.	- solve problems involving addition, subtraction, multiplication and	denominator 100, and as a decimal
1000 (M) and recognise years		division and a combination of these, including understanding the	- solve problems which require knowing percentage and decimal equivalents of
written in Roman numerals.		meaning of the equals sign	1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10
		- solve problems involving multiplication and division, including scaling	or 25.
		by simple fractions and problems involving simple rates.	

Geometry — properties of shapes	Geometry —	Statistics	Measurement
	Position and		
	Direction		
- identify 3-D shapes, including cubes and other cuboids, from 2-	- identify, describe	- solve	- convert between different units of metric measure (for example, kilometre and metre;
D representations	and represent the	comparison, sum	centimetre and metre; centimetre and millimetre; gram and kilogram; litre and
- know angles are measured in degrees: estimate and compare	position of a	and difference	millilitre)
acute, obtuse and reflex angles	shape following a	problems using	- understand and use approximate equivalences between metric units and common imperial units such as
- draw given angles, and measure them in degrees (o)	reflection or	information	inches, pounds and pints
- identify: angles at a point and one whole turn (total 360o),	translation, using	presented in a line	- measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
angles at a point on a straight line and 1/2 a turn (total 180o)	the appropriate	graph	- calculate and compare the area of rectangles (including squares), and including using standard units,
- other multiples of 90o	language, and	- complete, read	square centimetres (cm2) and square metres (m2) and estimate
- use the properties of rectangles to deduce related facts and find	know that the	and interpret	the area of irregular shapes
missing lengths and angles	shape has not	information in	- estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)]
- distinguish between regular and irregular polygons based on	changed.	tables, including	and capacity [for example, using water]
reasoning about equal sides and angles.		timetables.	- solve problems involving converting between units of time
			- use all four operations to solve problems involving measure [for example, length, mass, volume, money]
			using decimal notation, including scaling.

- Where there are objectives from multiple areas in one week, it is because there are opportunities to teach the objectives together over the week. Please feel free to speak to me if you need some help with planning for these weeks.

Week	1	2	3	4	5	6	7	8
Objectives to be covered through daily calculation and starters:	- add and subtract wi - add and subtract nu - multiply numbers up - divide numbers up t - multiply and divide - add and subtract fro	nole numbers with more tho imbers mentally with increa i to 4 digits by a one- or tw o 4 digits by a one-digit nu	ro-digit number using a formal mber using the formal written nvolving decimals by 10, 100 ninator	mal written methods written method, includ method of short divisio			the context	
Autumn 1	- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit - count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 - solve number problems and practical problems that involve all of the above	- add and subtract numbers mentally with increasingly large numbers - multiply and divide numbers mentally drawing upon known facts - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents - read, write, order and compare numbers with up to three decimal places	- round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 - round decimals with two decimal places to the nearest whole number and to one decimal place	- add whole numbers with more than 4 digits, including using formal written methods - 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.	- interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero - solve comparison, sum and difference problems using information presented in a line graph - complete, read and interpret information in tables, including timetables.	- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers	and interpret information in tables, including timetables solve problems involving converting between units of time
Objectives to be covered through daily calculation and starters:								
Autumn 2	- subtract whole numbers with more than 4 digits, including using	- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and	- compare and order fractions whose denominators are all multiples of the same number	- read, write, order and compare numbers to at least 1 000 000 and	- measure and calculate the perimeter of composite rectilinear shapes in	- recognise mixed numbers and improper fractions and convert from one form to the	- know angles are measured in degrees: estimate and compare acute,	

	formal written	interpret years in days	identify name and write	determine the welve	continuotres and	other and write	obtuse and reflex	
	formal written methods	interpret remainders appropriately for the	- identify, name and write equivalent fractions of a	determine the value of each digit	centimetres and metres	mathematical	angles	
	- use rounding to	context	given fraction, represented	- count forwards or	- convert between	statements > 1 as	- draw given	
	check answers to	- multiply and divide	visually, including tenths	backwards in steps	different units of	a mixed number	angles, and	
	calculations and	whole numbers and	and hundredths	of powers of 10 for	metric measure	- identify, name	measure them in	
	determine, in the	those involving decimals		any given number		and write	degrees (o)	
	context of a	by 10, 100 and 1000		up to 1 000 000		equivalent fractions	- identify: angles at	
	problem, levels of			- interpret negative		of a given fraction,	a point and one	
	accuracy			numbers in context,		represented	whole turn (total	
	- solve addition and			count forwards and		visually, including	360o), angles at a	
	subtraction multi-			backwards with		tenths and	point on a straight	
	step problems in			positive and		hundredths	line and 1/2 a turn	
	contexts, deciding			negative whole			(total 180o)	
	which operations and methods to use			numbers, including			- other multiples of 90o	
	and why.			through zero - round any			900	
	ana wity.			number up to 1				
				000 000 to the				
				nearest 10, 100,				
				1000, 10 000 and				
				100 000				
				- solve number				
				problems and				
				practical problems				
				that involve all of				
				the above				
		1000 0 0		- link to money?				
Objectives to be covered through			se years written in Roman nu					
daily calculation and			in 4 digits, including using for	mal written methods				
starters:		ımbers mentally with increa		l contagno de agle e di Seculo.	lin a lan a maniferali asetan	. Carragner di ata		
	- multiply numbers up	o to 4 digits by a one- or tw	o-digit number using a formal	i writteri method, includ	ung tong multiplication	i ioi iwo-aigit		
		o 4 digits hu a one-digit nu	mber using the formal written	method of short division	n and interpret remain	nders appropriately		
	for the context	o , aigus og a one-aigu na	moer using the formal written	metriou or sitore atviste	ara areer precirental	tacis appropriately		
	I .	whole numbers and those ir						
	- add and subtract fro	actions with the same denor	minator and denominators tha	it are multiples of the s	ame number			
			s and convert from one form t					
		ferent units of metric measu						
Spring	- identify multiples	- identify, describe and	- add and subtract	- know angles are	- calculate and	- recognise and use		
1	and factors,	represent the position of	fractions with the same	measured in	compare the area	square numbers		
'	including finding all	a shape following a	denominator and	degrees: estimate	of rectangles	and cube numbers,		
	factor pairs of a	reflection or translation,	denominators that are	and compare acute,	(including squares),	and the notation		
	number, and	using the appropriate	multiples of the same	obtuse and reflex	and including using	for squared (2) and		
	common factors of	language, and know	number	angles	standard units,	cubed (3)		
	two numbers	that the shape has not		- draw given	square centimetres	- solve problems		
		changed.		angles, and	(cm2) and square	involving		

	- know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers - establish whether a number up to 100 is prime and recall prime numbers up to 19			measure them in degrees (o) - identify: angles at a point and one whole turn (total 360o), angles at a point on a straight line and 1/2 a turn (total 180o) - other multiples of 90o	metres (m2) and estimate the area of irregular shapes - convert between different units of metric measure	multiplication and division including using their knowledge of factors and multiples, squares and cubes	
Objectives to be covered through daily calculation and starters:	- add and subtract wl - add and subtract nu - multiply numbers up numbers - divide numbers up to for the context - multiply and divide - add and subtract from - recognise mixed num - convert between diff	hole numbers with more the imbers mentally with incread to 4 digits by a one- or two 4 digits by a one-digit nuwhole numbers and those in actions with the same denombers and improper fraction ferent units of metric measure.	ro-digit number using a formal mber using the formal written avolving decimals by 10, 100 minator and denominators that and convert from one form t	mal written methods written method, include method of short division and 1000 t are multiples of the so o the other	on and interpret remain	, and the second	
Spring 2	- convert between different units of metric measure (for example, kilometre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) - understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	- read and write decimal numbers as fractions - recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal	- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign - multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers - divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	- identify 3-D shapes, including cubes and other cuboids, from 2-D representations — estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]	- use the properties of rectangles to deduce related facts and find missing lengths and angles - distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams - recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number	

Objectives to be		1000 (A.)	- add and subtract whole numbers with more than 4 digits, including using formal written methods						
Objectives to be covered through daily calculation and starters:	- add and subtract whole numbers with more than 4 digits, including using formal written methods								
Summer 1	- convert between different units of metric measure - measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres - calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes	- identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.	- solve comparison, sum and difference problems using information presented in a line graph - complete, read and interpret information in tables, including timetables Link to negative numbers, decimals, money, measures etc.	- use the properties of rectangles to deduce related facts and find missing lengths and angles - distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	- solve problems involving addition, subtraction, multiplication and a combination of these, including understanding the meaning of the equals sign - solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.				
Objectives to be covered through daily calculation and starters:	- add and subtract w - multiply numbers up - divide numbers up t	hole numbers with more tha o to 4 digits by a one- or tw o 4 digits by a one-digit nu	se years written in Roman nu n 4 digits, including using for o-digit number using a formal nber using the formal written wolving decimals by 10, 100	mal written methods l written method, includ method of short divisio	ding long multiplication on and interpret remain	for two-digit numbers ders appropriately for t	he context		

recognise mixed numbers and improper fractions and convert from one form to the other add and subtract fractions with the same denominator and denominators that are multiples of the same number multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams convert between different units of metric measure - recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) know angles are use all four solve problems solve problems compare and identify 3-D shapes, solve number Summer order fractions including cubes and measured in degrees: operations to solve which require problems and involving 2 multiplication and other cuboids, from 2-D knowing whose estimate and compare problems involving practical problems representations measure [for percentage and that involve all of division including denominators are acute, obtuse and reflex decimal equivalents all multiples of the – estimate volume [for example, length, the above using their draw given angles, and of ½, ¼, 1/5, 2/5, knowledge of same number example, using 1 cm3 mass, volume, 4/5 and those identify, name and blocks to build cuboids measure them in degrees money] using factors and write equivalent (including cubes)] decimal notation, fractions with a multiples, squares - identify: angles at a fractions of a given and capacity [for including scaling. denominator of a and cubes example, using water] fraction, point and one whole turn multiple of 10 or solve problems 25. represented (total 360o), angles at a involving addition, visually, including point on a straight line - solve problems subtraction, tenths and multiplication and and 1/2 a turn (total involving number hundredths up to three decimal division and a - recognise mixed other multiples of 900 combination of places numbers and use the properties of these, including improper fractions rectangles to deduce understanding the and convert from related facts and find meaning of the one form to the missing lengths and angles equals sign other and write distinguish between - solve problems mathematical regular and irregular involving statements > 1 as a polygons based on multiplication and division, including mixed number reasoning about equal add and subtract sides and angles. scaling by simple fractions with the fractions and problems involving same denominator and denominators simple rates. that are multiples of the same number multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams