Number and PV	+ -	x÷	Fractions, Decimals and %
- 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 - interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero - round any 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 - read Roman numerals to 1000 (M) and recognise years written in Roman numerals.	- add and subtract whole numbers with more than 4 digits, including using formal written methods - 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.	- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers - know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers - establish whether a number up to 100 is prime and recall prime numbers up to 19 - multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers - multiply and divide numbers mentally drawing upon known facts - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) - solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes - solve problems involving addition, subtraction, multiplication and division 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.	- compare and order fractions whose denominators are all multiples of the same number - identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths - recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number - 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 - read and write decimal numbers as fractions - recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents - round decimals with two decimal places to the nearest whole number and to one decimal place - read, write, order and compare numbers with up to three decimal places - solve problems involving number up to three decimal places - 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 which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.

Geometry – properties of shapes	Geometry – Position and Direction	Statistics	Measurement
- identify 3-D shapes, including cubes and other cuboids, from 2-D representations - know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles - draw given angles, and 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 - 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.	- 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.	- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) - understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints - 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 - estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] - 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:	- read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - add and subtract whole numbers with more than 4 digits, including using formal written methods - add and subtract numbers mentally with increasingly large numbers - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - add and subtract fractions with the same denominator - convert between different units of metric measure							
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	- complete, read and interpret information in tables, including timetables. - solve problems involving converting between units of time
Objectives to be covered through daily calculation and starters:	- read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - add and subtract whole numbers with more than 4 digits, including using formal written methods - add and subtract numbers mentally with increasingly large numbers - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - add and subtract fractions with the same denominator - convert between different units of metric measure							
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 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 remainders appropriately for the context - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	- identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	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 - interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero - round any 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 - link to money?	centimetres and metres - convert between different units of metric measure	other and write mathematical statements > 1 as a mixed number - identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	obtuse and reflex angles - draw given angles, and 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
Objectives to be covered through daily calculation and starters:	- read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - add and subtract whole numbers with more than 4 digits, including using formal written methods - add and subtract numbers mentally with increasingly large numbers - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - add and subtract fractions with the same denominator and denominators that are multiples of the same number - recognise mixed numbers and improper fractions and convert from one form to the other - convert between different units of metric measure						
Spring 1	- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers	- 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.	- add and subtract fractions with the same denominator and denominators that are multiples of the same number	- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles - draw given angles, and	- calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square	- recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) - solve problems 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:	- read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - add and subtract whole numbers with more than 4 digits, including using formal written methods - add and subtract numbers mentally with increasingly large numbers - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - add and subtract fractions with the same denominator and denominators that are multiples of the same number - recognise mixed numbers and improper fractions and convert from one form to the other - convert between different units of metric measure - recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)						
Spring 2	- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) - understand and use approximate equivalences between metric 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	

			- add and subtract whole numbers with more than 4 digits, including using formal written methods			
Objectives to be covered through daily calculation and starters:	- read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - add and subtract whole numbers with more than 4 digits, including using formal written methods - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - 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)					
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 division 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:	- read Roman numerals to 1000 (M) and recognise years written in Roman numerals. - add and subtract whole numbers with more than 4 digits, including using formal written methods - 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 - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000					

	- 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)						
Summer 2	- compare and order fractions whose denominators are all multiples of the same number - identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths - recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number - 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	- 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]	- know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles - draw given angles, and 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 - 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.	- use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.	- solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25. - solve problems involving number up to three decimal places	- solve number problems and practical problems that involve all of the above - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	- solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes - solve problems involving addition, subtraction, multiplication and division 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.	