	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Autumn 1** **Place Value** Counting and ordering Partitioning Rounding Negative Numbers Roman Numerals			**Autumn 2** **Operations** Addition and Subtraction Multiplication and division YR5 and 6 Prime, square, cubed, factors etc.						**Autumn 3** **Fractions** Equivalent fractions . Simplifying Mixed numbers Compare and Order Addition and Subtraction		
Spring	**Spring 1** **Fractions** Multiplying and dividing integers and fractions YR3/4 recap	**Spring 2** **Decimals and Percentages** YR3- understanding and using tenths in mass Place value of decimals to three places (year specific) Rounding, ordering and comparing Addition and Subtraction of decimals Multiplying and dividing decimals		**Spring 3** **Decimals and Algebra/Ratio** Decimals for money Forming expressions, formulae and substitution Ratio symbol Calculating ratio			**Spring 4** **Length, Perimeter, Area and Volume** Measure length Equivalent lengths Perimeter Area of shapes Estimate volume				**Spring 5** **Statistics** Interpreting data Pictograms, graphs, charts, pie charts Line graphs	
Summer	**Summer 1** **Properties of Shape** Angles, Shape, angles and movement Symmetry		**Summer 2** **Geometry:** Position and Direction Coordinates,	**Summer 3** **Time/Ratio** Minutes, hours, days, weeks AM and PM Analogue to digital Seconds			**Summer 4** **Revision**					

KEY STAGE 2 MIXED AGE MATHS CURRICULUM OUTLINE

Autumn 1 Place Value	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Content	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, ones) compare and order numbers up to 1000 identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words solve number problems and practical problems involving these ideas.	count in multiples of 6, 7, 9, 25 and 1000 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) 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 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 concept of zero and place value.	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.	read, write, order and compare numbers up to 10 000 000 and determine the value of each digit round any whole number to a required degree of accuracy use negative numbers in context, and calculate intervals across zero solve number and practical problems that involve all of the above.

Autumn 2 Calculation	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Content	add and subtract numbers mentally, including: a three-digit number and ones a three-digit number and tens a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar 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 addition and subtraction. recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	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 deciding which operations and methods to use and why	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. multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	perform mental calculations, including with mixed operations and large numbers solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

Autumn 3 Fractions	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	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, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators compare and order unit fractions, and fractions with the same denominators	count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. add and subtract fractions with the same denominator	compare and order fractions whose denominators are all multiples of the same number recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements G 1 as a mixed number [for example, $^{2}/_{5} + {}^{4}/_{5} = {}^{6}/_{5} = 1\ {}^{1}/_{5}$] add and subtract fractions with the same denominator and denominators that are multiples of the same number	use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Spring 1 Fractions	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	compare and order unit fractions, and fractions with the same denominators	find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 × 1/2 = 1/8] divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6] associate a fraction with division

				and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]

Spring 2 Decimals and Percentages	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $^1/_4$, $^1/_2$, $^3/_4$ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths round decimals with one decimal place to the nearest whole number compare numbers with the same number of decimal places up to two decimal places solve simple measure and money problems involving fractions and decimals to two decimal places.	multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams read and write decimal numbers as fractions [for example, 0.71 = 71/100] 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	•identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places •multiply one-digit numbers with up to two decimal places by whole numbers •use written division methods in cases where the answer has up to two decimal places •solve problems which require answers to be rounded to specified degrees of accuracy •recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

			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.	

Spring 3 Decimals of money, algebra and ratio	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	add and subtract amounts of money to give change, using both £ and p in practical contexts	add and subtract amounts of money to give change, using both £ and p in practical contexts	add and subtract amounts of money to give change, using both £ and p in practical contexts	use simple formulae generate and describe linear number sequences express missing number problems algebraically find pairs of numbers that satisfy an equation with 2 unknowns enumerate possibilities of combinations of 2 variables
Spring 4 Length, perimeter and area	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) measure the perimeter of simple 2-D shapes	Convert between different units of measure [for example, kilometre to metre; hour to minute] measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares	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	solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit

		estimate, compare and calculate different measures, including money in pounds and pence	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 (cm^2) and square metres (m^2) and estimate the area of irregular shapes estimate volume [for example, using 1 cm^3 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.	of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places convert between miles and kilometres 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 calculate the area of parallelograms and triangles calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3].

Spring 5 Statistics	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	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.	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.	complete, read and interpret information in tables, including timetables. solve comparison, sum and difference problems using information presented in a line graph	interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average.

Summer 1 Properties of Shape	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon	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. equal sides and angles.	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.
Summer 2 Geometry	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Content	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 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.	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 complete a simple symmetric figure with respect to a specific line of symmetry. identify acute and obtuse angles and compare and order angles up to two right angles by size	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 (°) 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° use the properties of rectangles to deduce related facts and find missing lengths and angles distinguish between regular and	draw 2-D shapes using given dimensions and angles recognise, describe and build simple 3-D shapes, including making nets compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.

			irregular polygons based on reasoning about	
Summer 3 Time	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of 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 compare durations of events [for example to calculate the time taken by particular events or tasks].	read, write and convert time between analogue and digital 12- and 24-hour clocks solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	solve problems involving converting between units of time	solve problems involving converting between units of time

Summer 4 Revision	**Year 3**	**Year4**	**Year 5**	**Year 6**
Content	Pupil lead revision sessions Mind mapping of place value and number Geometry revision Fluency in calculation and arithmetic paper practise Mind map of measures Applying skills to mixed questions	Pupil lead revision sessions Mind mapping of place value and number Geometry revision Fluency in calculation and arithmetic paper practise Mind map of measures Applying skills to mixed questions	Pupil lead revision sessions Mind mapping of place value and number Geometry revision Fluency in calculation and arithmetic paper practise Mind map of measures Applying skills to mixed questions with	Pupil lead revision sessions Mind mapping of place value and number Geometry revision with circles and angles Fluency in calculation and arithmetic paper practise Mind map of measures and conversion

			higher level of challenge	Applying skills to mixed questions with challenging levels.