Place Value Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	Develop fast recognition of up to 3 objects, without having to count them individually ('subitising') Recite numbers past 5 Say one number for each item in order: 1,2,3,4,5. (1:1 correspondence) Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle')	Count objects, actions and sounds Subitise Count beyond ten Link the number symbol (numeral) with its cardinal number value. **ELG:** Have a deep understanding of number to 10, including the composition of each number Subitise (recognise quantities without counting) up to 5 Verbally count beyond 20, recognising the pattern of the counting system	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count numbers to 100 in numerals Count in multiples of twos, fives and tens **Autumn 1 and 4** **Spring 2** **Summer 4**	Count in steps of two, three and five from 0 and in tens from any number, backwards and forwards **Autumn 1**	Count from 0 in multiples of 4, 8, 50 and 100 Find 10 or 100 more or less than a given number **Autumn 1 and 3**	Count in multiples of 6, 7, 9, 25 and 1000 Count backwards through zero to include negative numbers **Autumn 1 and 4**	Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 Count forwards and backwards with positive and negative whole numbers, including through zero **Autumn 1**	

Place Value: Represent	Show 'finger numbers' up to 5 Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 Experiment with their own symbols and marks as well as numerals.	Explore the composition of numbers to 10. **ELG:** Have a deep understanding of number to 10, including the composition of each number Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity	Identify and represent numbers using objects and pictorial representations Read and write numbers up to 100 in numerals Read and write numbers from 1 to 20 in numerals and words **Autumn 1 and 4** **Spring 2** **Summer 4**	Read and write numbers to at least 100 in numerals and in words Identify, represent and estimate numbers using different representations, including the number line **Autumn 1**	Identify, represent and estimate up to 3-digit numbers using different representations Read and write numbers up to 1000 in numerals and in words **Autumn 1**	Identify, represent and estimate up to 4-digit numbers using different representations 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 **Autumn 1**	Read, write (order and compare) umbers up to at least 1,000,000 and determine the value of each digit Read Roman Numerals to 1000 (M) and recognise years written in Roman Numerals **Autumn 1**	Read, write (order and compare) numbers up to 10,000,000 and determine the value of each digit **Autumn 1**

Place Value Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Use PV and Compare	Compare quantities using language: 'more than', 'fewer than'.	Compare numbers Understand the 'one more than/one less than' relationship between consecutive numbers	Given a number, identify one more and one less **Autumn 1 and 4** **Spring 2** **Summer 4**	Recognise the place value of each digit in a 2-digit number (tens and ones) Compare and order numbers from 0 up to 100 Use < > and = signs **Autumn 1**	Count from 0 in multiples of 4, 8, 50 and 100 Find 10 or 100 more or less than a given number **Autumn 1 and 3**	Count in multiples of 6, 7, 9, 25 and 1000 Count backwards through zero to include negative numbers **Autumn 1 and 4**	Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 Count forwards and backwards with positive and negative whole numbers, including through zero **Autumn 1**	

Place Value: Problems and Rounding	Solve real world mathematical problems with numbers up to 5			Use place value and number facts to solve problems **Autumn 1**	Solve number problems and practical problems involving these ideas above **Autumn 1**	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 **Autumn 1**	Interpret negative numbers in context Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000 Solve number problems and practical problems that involve all of the above **Autumn 1**	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 1**

Addition and Subtraction Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Add & Subtract: Recall, Represent, Use		Automatically recall number bonds for numbers 0–5 and some to 10 **ELG** Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Represent and use number bonds and related subtraction facts within 20 **Autumn 2** **Spring 1**	Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100 Show that addition of two numbers can be done in any order (commutative) and subtraction cannot Recognise and use the inverse relationship between + and – and use this to check and to solve missing number problems **Autumn 2**	Estimate the answer to a calculation and use inverse operations to check answers **Autumn 2**	Estimate the answer to a calculation and use inverse operations to check answers **Autumn 2**	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	
Add & Subtract: Calculations			Add and subtract one-digit numbers to 20, including zero **Autumn 2** **Spring 1**	Add and subtract numbers using concrete objects, pictorial representations and mentally: ● a 2-digit number and ones ● a 2-digit number and tens ● two 2-digit numbers ● three 1-digit numbers **Autumn 2**	Add and subtract numbers mentally: ● a 3-digit number and ones ● a 3-digit number and tens ● a 3-digit number and hundreds ● two 3-digit numbers Add and subtract up to 3-digit numbers using formal written columnar methods **Autumn 2**	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate **Autumn 2**	Add and subtract whole numbers with more than 4 digits, including using the formal written methods of columnar addition and subtraction and mental strategies with increasingly large numbers **Autumn 2**	Perform mental calculations, including with mixed operations and large numbers Use their knowledge of the order of operations to carry out calculations involving the 4 operations **Autumn 2**

Addition and Subtraction Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Add & Subtract : Solve Problems			Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = - 9 **Autumn 2** **Spring 1**	Solve problems with addition and subtraction: ● using concrete objects and pictorial representations, including those involving numbers, quantities and measures ● applying their increasing knowledge of mental and written methods **Autumn 2**	Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction **Autumn 2**	Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why **Autumn 2**	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 and a combination of these, including the meaning of the equals sign **Autumn 2**	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why **Autumn 2**

Multiplication and Division Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Multiply & Divide: Recall, Represent, Use		**ELG** Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Show that multiplication of two numbers can be done in any order (commutative) and division cannot **Autumn 2** **Spring 1**	Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables **Autumn 3**	Recall multiplication and division facts for multiplication tables up to 12 x 12 Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1, dividing by 1, multiplying 3 numbers Recognise and use factor pairs and commutativity in mental calculations **Autumn 4** **Spring 1**	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 (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19 Recognise square numbers and cube numbers and their notation **Autumn 4**	Identify common factors, common multiples and prime numbers Use estimation to check answers to calculations and determine, in the context of a problem, an approximate degree of accuracy **Autumn 2**
Multiply & Divide: Calculations				Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs. **Autumn 4** **Spring 1**	Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to more formal written methods **Autumn 3** **Spring 1**	Multiply 2-digit numbers by a 1-digit number using formal written layout **Spring 1**	Multiply numbers up to 4-digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers Multiply and divide mentally drawing upon known facts Divide numbers up to 4-digits by a 1--digit number using the formal short division method and interpret remainders appropriately for the context Multiply and divide numbers (including those with decimals) by 10, 100 and 1000 **Autumn 4 Spring 1**	Multiply multi-digit numbers by a 2-digit whole number using formal written method of long multiplication Divide numbers up to 4-digits by a 2-digit whole number using the formal long division method and interpret remainders as whole number, fractions or by rounding, as appropriate for the context Divide 4-digit numbers using the formal short division methods where appropriate, interpreting remainders Perform mental calculations, including with mixed operations and large numbers **Autumn 2**

Multiplication and Division Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Multiply & Divide: Solve Problems			Solve 1-step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Summer 1**	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and known facts, including problems in contexts **Autumn 4** **Spring 1**	Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects **Spring 1**	Solve problems, involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1-digit numbers, integer scaling problems and harder correspondence problems such as n objects are connected to m objects **Spring 1**	Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares, cubes Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates **Autumn 4** **Spring 1**	Solve problems involving addition, subtraction, multiplication and division **Autumn 2**
Multiply & Divide: Combined Operations							Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign **Spring 1**	Use their knowledge of the order of operations to carry out calculations involving the four operations **Autumn 2**

Fractions, Decimals and Percentages Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Recognise and Write			Recognise, find and name a half as one of two equal parts of an object, shape or quantity Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity **Spring 4**	Recognise, find, name and write fractions 1/3 ¼ 2/4 and ¾ of a length, shape, set of objects or quantity **Spring 4**	Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and dividing 1-digit numbers or quantities by 10 Recognise, find and write fractions of a discrete set of objects: unit and non-unit fractions with small denominators Recognise and use fractions as numbers: unit and non-unit fractions with small denominators **Spring 5**	Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten **Spring 3**	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 (eg. 2/5 + 4/5 = 6/5 = 1 1/5) **Spring 2**	
Fractions: Compare				Recognise the equivalence of 2/4 and ½ **Spring 4**	Recognise and show, using diagrams, equivalent fractions with small denominators Compare and order unit fractions, and fractions with the same denominators **Summer 1**	Recognise and show, using diagrams, families of common equivalent fractions **Spring 3**	Compare and order fractions whose denominators are all multiples of the same number **Spring 2**	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Compare and order fractions, including fractions >1 **Autumn 3**

Fractions, Decimals and Percentages Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Calculations				Write simple fractions for example, ½ of 6 = 3 **Spring 4**	Add and subtract fractions with the same denominator within one whole (for example, 5/7 + 1/7 = 6/7) **Summer 1**	Add and subtract fractions with the same denominator **Spring 3**	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 **Spring 3**	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Multiply simple pairs of proper fractions, writing the answer in its simplest form Divide proper fractions by integers **Autumn 3**
Fractions: Solve Problems					Solve problems that involve all of the above **Spring 5** **Summer 1**	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number **Spring 3**		

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Decimals: Recognise and Write						Recognise and write decimal equivalents of any number of tenths and hundredths Recognise and write decimal equivalents to ¼ ½ and ¾ **Spring 4** **Summer 1**	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 **Spring 3**	Identify the value of each digit in numbers given to three decimal places **Spring 1**
Decimals: Compare						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 **Summer 1**	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 **Spring 3**	
Decimals: Calculations & Problems						Find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of digits in the answer as ones, tenths and hundredths **Spring 4**	Solve problems involving number up to three decimal places **Summer 1**	Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places Multiply 1-digit numbers with up to two decimal places by whole numbers Use written division methods in cases where the answer has to be rounded to specified degrees of accuracy **Spring 1**

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions, Decimals and Percentages						Solve simple measure and money problems involving fractions and decimals to two decimal places **Spring 3** **Spring 4** **Summer 1**	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 **Spring 3**	Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction (for example 3/8) Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts **Spring 1** **Spring 2**
Ratio and Proportion								Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer X and division facts Solve problems involving the calculation of percentages and for the use of percentages for comparison Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples **Spring 6**

Measures Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Using Measures	Make comparisons between objects relating to size, length, weight and capacity	Compare length, weight and capacity	Compare, describe and solve practical problems for: - lengths and heights (long/tall/short, longer/shorter, double/half) - mass/weight (heavy/light, heavier than/lighter than) - capacity and volume (full/empty, more than, less than, half full, quarter full) - time (quicker, slower, earlier, later) Measure and begin to record the following: - lengths and heights - mass/weight - capacity and volume - time (hours, minutes, seconds) **Spring 3** **Spring 4** **Summer 6**	Choose and use appropriate standard units to estimate and measure: - length/height in any direction (m/cm) - mass (kg/g) - temperature (°C) - capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and = **Spring 5** **Summer 4**	Measure, compare, add and subtract: - length/height in any direction (m/cm/mm) - mass (kg/g) - volume/capacity (litres/ml) **Spring 4** **Summer 4**	Convert between different units of measure (e.g. kilometre to metre, hour to minutes) Estimate, compare and calculate different measures **Autumn 3** **Spring 2** **Summer 3**	Convert between different units of metric measure e.g.: - km and m - cm and mm - g and kg - l and ml Understand and use approximate equivalences between metric units ad common imperial units such as inches, pounds and pints Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scales **Summer 1** **Summer 4** **Summer 5**	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit and vice versa, using decimal notation up to three decimal places Convert between miles and kilometres **Spring 4**

Measures Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Measurement: Money			Recognise and know the value of different denominations of coins and notes **Summer 5**	Recognise and use the symbol for pounds (£) and pence (p); combine amounts to make a particular value Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change **Autumn 3**	Add and subtract amounts of money to give change, using both £ and p in practical contexts **Spring 2**	Estimate, compare and calculate different measures including money in pounds and pence **Summer 2**	Use all four operations to solve problems involving measure (for example, money) **Summer 1**	
Measurement: Time	Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	Describes a sequence of events, real or fictional, using words such as 'first', 'then...'	Sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening) Recognise and use language relating to dates, including days of the week, weeks, months and years Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times **Summer 6**	Compare and sequence intervals of time Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times Know the number of minutes in an hour and the number of hours in a day **Summer 3**	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, am/pm, 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) **Summer 2**	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 **Summer 3**	Solve problems involving converting between units of time **Summer 4**	Use, read, write and convert between standard units, converting measurements of time from a smaller units to a larger unit and vice versa **Year 5 Summer 4**

Measures Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Perimeter, Area, Volume					Measure the perimeter of simple 2-D shapes **Spring 4**	Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares **Autumn 3** **Spring 2**	Measure and calculate the perimeter of composite rectilinear shapes in cm and m Calculate and compare the area of rectangles Including squares), and including using standard units, square cm (cm^2) and square m (m^2) and estimate the area of irregular shapes Estimate volume (e.g. using 1 cm^3 blocks to build cuboids (including cubes)) and capacity (e.g. using water) **Autumn 5** **Summer 5**	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 unit, including cubic centimetres (cm^3) and cubic metres (m^3) and extending to other units (e.g. mm^3 and km^3) **Spring 5**

Geometry Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: 2-D shapes	Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round' Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. Combine shapes to make new ones – an arch, a bigger triangle, etc.	Select, rotate and manipulate shapes to develop spatial reasoning skills Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can	Recognise and name common 2-D shapes (e.g. rectangles, including squares, circles and triangles) **Autumn 3**	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line Identify 2-D shapes on the surface of 3-D shapes (e.g. a circle on a cylinder and a triangle on a pyramid) Compare and sort common 2-D shapes and everyday objects **Spring 3**	Draw 2-D shapes **Summer 3**	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 **Summer 5**	Distinguish between regular and irregular polygons based on reasoning about equal sides and angles Use properties of rectangles to deduce related facts and find missing lengths and angles **Summer 2**	Draw 2-D shapes using given dimensions and angles Compare and classify geometric shapes based on their properties and sizes Illustrate and name parts of circles, including radius, diameter and circumference and know the diameter is twice the radius **Summer 1**
Geometry: 3-D shapes			Recognise and name common 3-D shapes (e.g. cuboids, including cubes, pyramids and spheres) **Autumn 3**	Recognise and name common 3-D shapes, e.g. cuboids (including cubes), pyramids and spheres Compare and sort common 3-D shapes and everyday objects **Spring 3**	Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them **Summer 3**		Identify 3-D shapes, including cubes and other cuboids, from their 2-D representations **Summer 2**	Recognise, describe and build simple 3-D shapes, including making nets **Summer 1**

Geometry Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Geometry: Angles and lines					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 **Summer 3**	Identify acute and obtuse angles and compare and order angles up to two right angles by size 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 **Summer 5**	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 a whole turn (360^{o}) - angles at a point on a straight line and ½ a turn (180^{o}) - other multiples of 90^{o} **Summer 2**	Find unknown angles in any triangles, quadrilaterals and regular polygons Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and missing angles **Summer 1**

Geometry: Position and Direction	Understand position through words alone – for example, "The bag is under the table," – with no pointing Describe a familiar route Discuss routes and locations, using words like Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. 'in front of' and 'behind'	Continue, copy and create repeating patterns	Describe position, direction and movement, including whole, half, quarter and three-quarter turns **Summer 3**	Order and arrange combinations of mathematical objects in patterns and sequences Use mathematical vocabulary to describe position, direction and movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti–clockwise) **Spring 3** **Summer 1**		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 **Summer 6**	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 **Summer 3**	Describe positions on the full coordinate grid (all four coordinates) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes **Autumn 4**

	Extend and create ABAB patterns – stick, leaf, stick, leaf Notice and correct an error in a repeating pattern. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'							

Statistics Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics: Present and Interpret				Interpret and construct simple pictograms, tally charts, block diagrams and simple tables **Spring 2**	Interpret and present data using bar charts, pictograms and tables **Spring 3**	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs **Summer 4**	Complete, read and interpret information in tables, including timetables **Autumn 3**	Interpret and construct pie charts and line graphs and use these to solve problems **Summer 3**
Statistics: Solve Problems				Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totalling and comparing categorical data **Spring 2**	Solve one-step and two-step questions (e.g. 'How many more?' and 'How many fewer?') using information presented in scaled bar charts and pictograms and tables **Spring 3**	Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs **Summer 4**	Solve comparison, sum and difference problems using information presented in a line graph **Autumn 3**	Calculate and interpret the mean as an average **Summer 3**

Algebra Progression

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Algebra			Solve one-step problems that involve addition and subtraction, using concrete and pictorial representations, and missing number problems such as 7 = ? - 9	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	Solve problems, including missing number problems			Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables **Spring 3**

NOTE: although algebraic notation is introduced in Year 6, algebraic thinking starts much earlier as exemplified by the ‘missing number’ objectives from Years 1, 2 and 3.