Summary of Essential Learning in Year 1

- Count to and across 100; count in 2s, 5s, 10s from zero; read and write numbers to 100 in numerals
- Count out, quantify, compare sizes of sets of objects; order and describe comparative size of numbers to 20; use ordinal numbers
- Understand and apply the operations of addition and subtraction and the operations of division and multiplication as equal sharing, repeated equal grouping; find halves and quarters
- Represent, memorise and use addition facts to 9 + 9 and derive related subtraction facts; identify 1 and 10 more/less
- Take and compare measurements using common standard units; use language of and tell time to hour and half hour; recognise and use coins
- Recognise, describe and name common 2-D and 3-D shapes; use the language of position, direction and movement; make whole, half and quarter turns

Summary of Essential Learning in Year 2

- Count forwards and backwards, count in 2s and 5s from zero and in 10s from any number; read and write numbers in numerals and words
- Compare and order numbers to 100; identify the value of the digits in two-digit numbers; partition into tens and ones and tens and 'teens'
- Construct and recall number bonds for 1-digit number to 9 + 9 and use to derive related subtraction facts; apply to multiples of 10; add 10 to any number to 100, and add and subtract one- and two-digit numbers
- Interpret arrays and carry out repeated addition and sharing calculations; read and record multiplication and division number sentences using signs x and ÷; recall and use multiplication facts for 2, 5 and 10; read, write and find halves, thirds, quarters of shapes, quantities and lengths
- Use appropriate standard units to measure; read values on a scale to nearest interval including time to nearest 5 minutes; order lengths, weights, capacities; make up sums of money, record amounts using £ or p
- Name, identify common 2-D and 3-D shapes in different orientations, and describe and use their properties; describe position, direction and movement, relating right-angle turns to quarter turns

Summary of Essential Learning in Year 3

- Count forwards and backwards, count in 2s, 3s, 4s, 5s, 6s, 8s, from zero and in 10s, 100s from any number; recall multiplication facts for 2, 3, 4, 5, 6, 8 and 10
- Compare and order numbers to 1000 and read and write numbers in numerals and words; identify place value of digits in three-digit numbers and partition into hundreds, tens and units, and hundreds and teens
- Add and subtract mentally three-digit numbers to combinations of 1s, 10s, 100s; use formal written methods to add and subtract pairs of three-digits numbers
- Use table knowledge to multiply mentally one-digit and two-digit numbers by combinations of 1s, 10s and to derive division facts; recognise a unit fraction is one part of a whole divided into equal parts and proper fractions as part numbers
- Know relationship between common metric measures; measure and record in mixed standard units including £ and p; read intervals on scales and use to estimate; tell time to nearest minute; interpret data in tables and bar charts
- Build 3-D shapes and draw 2-D shapes and describe them by their properties; recognise angles in shapes and compare them to right angles; make and name combinations of right-angle turns

Summary of Essential Learning in Year 4
• Count in single-digit multiples, and in 10s, 100s, 1000s from any number; use negative numbers to count backwards through zero
• Compare and order numbers beyond 1000; identify the place value of the digits in four-digit numbers and partition and recombine; round to nearest 10, 100 or 1000; in context, read, write and compare decimals up to hundredths
• Add and subtract mentally combinations of multiples of 1, 10, 100, 1000; use formal written methods to add and subtract numbers with up to four digits
• Recall multiplication facts to 12 x 12; use to derive division facts, and to multiply and divide multiples of 10 and 100 by single-digit numbers; use formal methods to record multiplication of two-digit and three-digit numbers by one-digit numbers; find unit and non-unit fractions of quantities; recognise equivalents
• Measure and convert between common standard units of measure including money and time; find and compare the perimeters and areas of rectangles; present small data sets as bar charts or time graphs and interpret and interrogate results
• Name, classify angles up to two right angles, and triangles and quadrilaterals with special properties; identify and use line symmetry; plot points in the first quadrant of coordinate grids and describe translations

Summary of Essential Learning in Year 5
• Count forwards and backwards from any number in powers of ten including through zero; interpret negative numbers and Roman numerals in context; determine prime, square and cube numbers
• Identify the value of digits in whole and decimal numbers; round numbers to the nearest power of ten and decimals to nearest whole number and to one decimal place; write decimals and percentages as fractions
• Add and subtract mentally pairs of numbers with up to four digits; use formal written methods to add and subtract whole numbers and decimal numbers in context; add and subtract fractions with related denominators
• Recall and use multiplication facts to 12 x 12 to multiply and divide mentally and identify factors and multiples; use formal methods to multiply numbers with up to four digits by 1- or 2-digit numbers, and to divide numbers with up to four digits by 1- or 2-digit numbers; multiply whole numbers by proper fractions to get whole number answers
• Convert between units of measure and time; calculate the perimeter and area of rectangles and composite shapes and volumes of cuboids; read, interpret and use data presented in tables, line and time graphs
• Recognise and name 3-D shapes from 2-D drawings; draw straight lines accurately and draw and measure angles in degrees; apply the properties of triangles and rectangles and identify regular polygons; reflect and translate shapes on grids including the coordinates in the first quadrant

Summary of Essential Learning in Year 6
• Identify the place value of the digits in large whole numbers and decimal numbers; round numbers, estimate and approximate to check results; use algebra to represent numbers, evaluate simple formulae and expressions
• Recall immediately number facts and the multiplication tables to 12x12 and carry out accurately mental calculations involving all four operations with whole numbers, decimals, fractions, percentages
• Use formal written methods of calculation for all four operations; understand and apply order of operations when calculating
• Express proportions and relationships between numbers and quantities as a fraction, percentage or ratio; construct, convert between and use equivalents
• Measure and draw accurately, convert units to take account of the context and required precision; take and compare reading on different scales; transform shapes and identify conserved properties; calculate missing angles
• Organise and analyse data in frequency tables; interpret and construct pie charts and line graphs that relate two variables; describe trends and relationships