

Progression - Targets with NC reference					
	Year 3	Year 4	Year 5	Year 6	Y7
N1 Counting	3N1b I can count from 0 in multiples of 4, 8, 50 and 100 3N1a	4N1 I can count in multiples of 6, 7, 9, 25 and 1000	5N1 I can count forward or backward in steps of powers of 10 for any given number up to 1 000 000 <i>(recognise and describe linear sequences (for example 3, 3½, 4, 4½ ...) including those involving fractions and decimals, and find the term to term rule in words (for example, add ½). Pupils continue to practise counting forward and backward in simple fractions).</i>		
N2 read, write, order and compare numbers	3N2a I can compare and order numbers up to 1000 I can read and write numbers up to 1000 in numerals and in words 3N2b I can find 10 or 100 more or less than a given number	4N2a I can order and compare numbers beyond 1000 4N2b I can find 1000 more or less than a given number	5N2 I can read, write, order and compare numbers to at least 1 000 000	6N2 I can read, write, order and compare numbers to at least 10 000 000	
N3 Place value and Roman numerals	3N3 I can recognise the place value of each digit in a 3-digit number (100s, 10s, 1s)	4N3a I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) 4N3b I can 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	5N3a I can determine the value of each digit (numbers up to 1 000 000) 5N3b I can read Roman numerals to 1000 (M) and recognise years written in roman numerals	6N3 I know the value of each digit in numbers up to 10 000 000	
N4 Identify, represent estimate, rounding	3N4 I can identify, represent and estimate numbers using different representations	4N4a I can identify, represent and estimate numbers using different representations 4N4b I can round any number to the nearest 10, 100 and 1000	5N4 I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000	6N4 I can round any whole number to a required degree of accuracy	
N5 -ve numbers		4N5 I can count backward through zero to include negative numbers	5N5 I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	6N5 I can use negative numbers in context and calculate intervals across zero e.g what is 20 more than - 8	
N6 Number problems	3N6 I can solve number problems and practical problems involving 3N1-3N5	4N6 I can solve number and practical problems that involve 4N1-4N5 of the above and with increasingly large positive numbers	5N6 I can solve number problems and practical problems that involve 5N1-5N5	6N6 I can solve number problems and practical problems that involve 6N2-6N5	
C1 + / - mentally	3C1 I can add and subtract numbers mentally, including a 3-digit number and ones; a 3-digit number and tens and a 3-digit number and hundreds		5C1 I can add and subtract numbers mentally with increasingly large numbers		
C2 +/- written methods	3C2 I can add and subtract nos with up to 3 digits, using formal written methods of columnar addition and subtraction	4C2 I can add and subtract nos with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	5C2 I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)		

C3 estimate, inverse and check	3C3 I can estimate the answer to a calculation and use inverse operations to check answers	4C3 I can estimate and use inverse operations to check answers to a calculation	5C3 I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	6C3 I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy	
C4 +/- Solve problems	3C4 I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	4C4 I can solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	5C4 I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	6C4 I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
C5 Propertie s of numbers Multiples, factors, primes, squares, cubes			5C5a I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers 5C5b I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers <i>(understand terms factor, multiple and prime, square & cube numbers and use them to construct equivalence statements (for example, $4 \times 35 = 2 \times 2 \times 35$; $3 \times 270 = 3 \times 3 \times 9 \times 10 = 9^2 \times 10$)).</i> 5C5c I can establish whether a number up to 100 is prime and recall prime numbers up to 19 5C5d I can recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	6C5 I can identify common factors, common multiples and prime numbers	
C6 Multiply Divide mentally	3C6 I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	4C6a I can recall multiplication and division facts for multiplication tables up to 12×12 4C6b I can use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers 4C6c I can recognise and use factor pairs and commutativity in mental calculations	5C6a I can multiply and divide numbers mentally drawing upon known facts 5C6b I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	6C6 I can perform mental calculations, including with mixed operations and large numbers	
C7 Multiply Divide using written methods	3C7 I can write and calculate mathematical statements for $\times$ and $\div$ using the multiplication tables that they know, including for 2-digit nos times 1-digit nos, using mental and progressing to formal written methods	4C7 I can multiply 2-digit and 3-digit numbers by a one-digit number using formal written layout	5C7a I can 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 5C7b I can 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	6C7a I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 6C7b I can divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division. 6C7b I can interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context	

C8 Solve problems (commutative, associative distributive and all 4 operations) C9 Order of operations	3C8 I can solve problems, including missing number problems, involving $\times$ and $\div$, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	4C8 I can solve problems involving multiplying & adding, including using the distributive law to multiply 2-digit nos by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	5C8a I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign (<i>Distributivity can be expressed as $a(b + c) = ab + ac$.</i>) 5C8b I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign (<i>Pupils use and explain the equals sign to indicate equivalence, including in missing number problems (for example, $13 + 24 = 12 + 25$; $33 = 5 \times \square$).</i>) 5C8c I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	6C8 I can solve problems involving addition, subtraction, multiplication and division 6C9 I can use knowledge of the order of operations to carry out calculations involving the four operations (<i>Pupils explore the order of operations using brackets; for example, $2 + 1 \times 3 = 5$ and $(2 + 1) \times 3 = 9$.</i>)	
	F1 Recognise find, write, name fractions 3F1a I can count up & down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit nos or quantities by 10 3F1b I can recognise, find & write fractions of a discrete set of objects: unit fractions & non-unit fractions with small denominators 3F1c I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	4F1 I can count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten			
F2 Equivalent fractions	3F2 I can recognise and show, using diagrams, equivalent fractions with small denominators	4F2 I can recognise and show, using diagrams, families of common equivalent fractions	5F2a I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$) 5F2b I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	6F2 I can use common factors to simplify fractions I can use common multiples to express fractions in the same denomination	
F3 compare order	3F3 I can compare and order unit fractions, and fractions with the same denominators		5F3 I can compare and order fractions whose denominators are all multiples of the same number	6F3 I can compare and order fractions, including fractions > 1	
F4 + / - fractions	3F4 I can add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]	4F4 I can add and subtract fractions with the same denominator	5F4 I can add and subtract fractions with the same denominator and multiples of the same number (<i>mentally add and subtract tenths, and one-digit whole numbers and tenths</i>)	6F4 I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	

F5 X / ÷ fractions			5F5 I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	6F5a I can multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] 6F5b I can divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]	
F6 Fractions/ decimals equivalence		4F6a I can recognise and write decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ 4F6b I can recognise and write decimal equivalents of any number of tenths or hundredths	5F6a I can read and write decimal numbers as fractions (for example, $0.71 = \frac{71}{100}$) 5F6b I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	6F6 I can associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]	
F7 Rounding		4F7 I can round decimals with one decimal place to the nearest whole number	5F7 I can round decimals with two decimal places to the nearest whole number and to one decimal place		
F8 Compare/ order		4F8 I can compare numbers with the same number of decimal places up to two decimal places	5F8 I can read, write, order and compare numbers with up to three decimal places		
F9 X / ÷ decimals		4F9 I can find effect of dividing a one- or two-digit no. by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths		6F9a I can identify the value of each digit to three decimal places I can multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places 6F9b I can multiply one-digit numbers with up to two decimal places by whole numbers 6F9c I can use written division methods in cases where the answer has up to two decimal places	
F10 Solve problems with fractions /decimals	3F10 I can solve problems that involve 3F1-3F4	4F10a I can solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the ans is a whole no. 4F10b I can solve simple measure and money problems involving fractions and decimals to two decimal places	5F10 I can solve problems involving number up to three decimal places	6F10 I can solve problems which require answers to be rounded to specified degrees of accuracy	
F11 F / D /% equivalence			5F11 I can 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	6F11 I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	

F12 Solve % problems			5F12 I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25		
R1 relative sizes, similarity				6R1 I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts	
R2 Use of % for comparison				6R2 I can solve problems involving the calculation of percentages [for example, of measures, such as 15% of 360] and the use of percentages for comparison	
R3 Scale factors				6R3 I can solve problems involving similar shapes where the scale factor is known or can be found	
R4 ÷ sharing, grouping				6R4 I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
A1 □ as algebra				6A1 I can express missing number problems algebraically	
A2				6A2 I can use simple formulae	
A3				6A3 I can generate and describe linear number sequences	
A4				6A4 I can find pairs of numbers that satisfy an equation with two unknowns	
A5				6A5 I can enumerate possibilities of combinations of two variables	
M1 Comp / order	3M1 I can compare lengths(m/cm/mm) 3M1b I can compare mass (kg/g) 3M1c I can compare volume/capacity(l/ml)	4M1 I can compare different measures, including money in pounds and pence			
M2 est / measure & read scales	3M2a Measure lengths (m/cm/mm) 3M2b measure mass (kg/g) 3M2c measure volume/capacity(l/ml)	4M2 I can estimate different measures, including money in pounds and pence			
M3					

M9 Solve problems money, length, mass/ weight, capacity / volume	3M9a I can add and subtract amounts of money to give change, using both £ and p in practical contexts 3M9b I can add and subtract lengths (m/cm/mm) 3M9c I can add and subtract mass (kg/g) 3M9d I can add and subtract volume/capacity(l/ ml)	4M9 I can calculate different measures, including money in pounds and pence	5M9a I can use all four operations to solve problems involving measure (money) using decimal notation, including scaling 5M9b I can use all four operations to solve problems involving measure [for example: length, using decimal notation including scaling 5M9c I can use all four operations to solve problems involving measure [for example: mass), using decimal notation including scaling 5M9d I can use all four operations to solve problems involving measure [for example: volume] using decimal notation including scaling	6M9 I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate	
G2 Describe properties and classify shapes	3G2 I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	4G2a I can compare/classify geometric shapes, incl. quadrilaterals and triangles, based on their properties/ sizes 4G2b I can identify lines of symmetry in 2-D shapes presented in different orientations 4G2c I can complete a simple symmetric figure with respect to a specific line of symmetry	5G2a I can use the properties of rectangles to deduce related facts and find missing lengths and angles <i>Pupils use the term diagonal and make conjectures about the angles formed by diagonals and sides, and other properties of quadrilaterals, for example using dynamic geometry ICT tool.</i> 5G2b I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles	6G2a I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons 6G2b I can describe simple 3-D shapes	
G3 Draw & make shapes relate 2D to 3D	3G3a I can draw 2-D shapes 3G3b I can make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them		5G3b I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations	6G3a I can draw 2-D shapes using given dimensions and angles 6G3b I can recognise, describe and build simple 3-D shapes, including making nets	
G4 Angles – measuring and properties	3G4a I can recognise angles as a property of shape or a description of a turn 3G4b I can 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	4G4 I can identify acute and obtuse angles and compare and order angles up to two right angles by size	5G4a I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles 5G4b I can identify: angles at a point and one whole turn (total 360 degrees); - angles at a point on a straight line and ½ a turn (total 180 degrees); - other multiples of 90 degrees 5G4c I can draw given angles, and measure them in degrees (°)	6G4a I can find unknown angles in any triangles, quadrilaterals and regular polygons 6G4b I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	

G5 circles				6G5 I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius <i>(These relationships might be expressed algebraically for example, $d = 2 \times r$; $a = 180 - (b + c)$.)</i>	
P2 Describe position direction and movement		4P2 I can describe movements between positions as translations of a given unit to the left/right and up/down	5P2 I can 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 <i>Pupils recognise and use reflection and translation in a variety of diagrams, including continuing to use a 2-D grid and coordinates in the first quadrant. Reflection should be in lines that are parallel to the axes.</i>	6P2 I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes <i>(Pupils draw and label rectangles (including squares), parallelograms and rhombuses, specified by coordinates in the four quadrants, predicting missing coordinates using the properties of shapes. These might be expressed algebraically for example, translating vertex (a, b) to (a-2, b+3); (a, b) and (a+d, b+d) being opposite vertices of a square of side d.)</i>	
P3 Coordinates		4P3a I can describe positions on a 2-D grid as coordinates in the first quadrant 4P3b I can plot specified points and draw sides to complete a given polygon		6P3 I can describe positions on the full coordinate grid (all four quadrants) <i>(Pupils draw and label a pair of axes in all four quadrants with equal scaling. This extends their knowledge of one quadrant to all four quadrants, including the use of negative numbers.)</i>	
S1 Interpret/represent data	3S1 I can interpret and present data using bar charts, pictograms and tables	4S1 I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	5S1 I can complete, read and interpret information in tables, including timetables	6S1 I can interpret and construct pie charts and line graphs and use these to solve problems	
S2 Solve problems involving data	3S2 I can 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.	4S2 I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	5S2 I can solve comparison, sum and difference problems using information presented in a line graph		
S3 Mean average				6S3 I can calculate and interpret the mean as an average	