

Progression in Mathematics – Year 4

Pupil name

Class/ Group (s)

Date (from - to)

	Dimension 1 – Number			Dimension 2 - Measurement
	Aspect 1 – Place Value	Aspect 2 – Four Rules	Aspect 3 – Fractions (including decimals and percentages)	Aspect 4 – Measurement
Year 4	<ul style="list-style-type: none"> Counts in multiples of 6, 7, 9, 25 and 1000 Finds 1000 more or less than a given number Counts backwards through zero to include negative numbers Recognises the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Orders and compares numbers beyond 1000 Identifies, represents and estimates numbers using different representations Rounds any number to the nearest 10, 100 or 1000 Solves number and practical problems that involve all of the above and with increasingly large positive numbers Reads Roman numerals to 100 (I to C) Knows that over time, the numeral system changed to include the concept of zero and place value 	<ul style="list-style-type: none"> Adds and subtracts numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimates and uses inverse operations to check answers to a calculation Solves addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why Recalls multiplication and division facts for multiplication tables up to 12×12 Uses place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Recognises and uses factor pairs and commutativity in mental calculations Multiplies two-digit and three-digit numbers by a one-digit number using formal written layout Divide two-digit and three-digit numbers by a one-digit number using formal written layout Solves problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects 	<ul style="list-style-type: none"> Recognises and shows, using diagrams, families of common equivalent fractions Counts up and down in hundredths Recognises that hundredths arise when dividing an object by one hundred and dividing tenths by ten Solves problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number Adds and subtracts fractions with the same denominator Recognises and writes decimal equivalents of any number of tenths or hundredths Recognises and writes decimal equivalents to $\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$ Finds the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths Rounds decimals with one decimal place to the nearest whole number Compares numbers with the same number of decimal places up to two decimal places Solves simple measure and money problems involving fractions and decimals to two decimal places 	<ul style="list-style-type: none"> Converts between different units of measure (for example, kilometre to metre; hour to minute) Measures and calculates the perimeter of a rectilinear figure (including squares) in centimetres and metres Finds the area of rectilinear shapes by counting squares Estimates, compares and calculates different measures, including money in pounds and pence Reads, writes and converts time between analogue and digital 12- and 24-hour clocks Solves problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days

	Dimension 3 – Geometry		Dimension 4 – Statistics	Dimension 5 - Algebra	Dimension 6 – Ratio and Proportion
	Aspect 5 – Properties of shapes	Aspect 6 – Position and direction	Aspect 7 – Statistics	Aspect 8 – Algebra	Aspect 9 – Ratio and Proportion
Year 4	<ul style="list-style-type: none"> Compares and classifies geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identifies acute and obtuse angles and compares and orders angles up to two right angles by size Identifies lines of symmetry in 2-D shapes presented in different orientations Completes a simple symmetric figure with respect to a specific line of symmetry 	<ul style="list-style-type: none"> Describes positions on a 2-D grid as coordinates in the first quadrant Describes movements between positions as translations of a given unit to the left/right and up/down Plots specified points and draws sides to complete a given polygon 	<ul style="list-style-type: none"> Interprets and presents discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solves comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs 		