
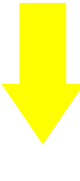







Mathematics KS3 Progression Pathway

Pupil Progression	Number and ratio	Geometry and Measure	Algebra	Statistics and Probability	Applying Mathematics
	I have achieved fluency in place value and calculating with decimals, negatives and simple fractions.	I have achieved fluency in calculating simple measures of 2D shapes and angle properties.	I have achieved fluency in manipulating simple expressions and plotting simple points and lines.	I have achieved fluency in recognising data types, drawing simple graphs and finding simple measures.	Student has a weak ability or reluctance in being able to apply and reason with basic mathematical skills.
	I have achieved fluency in using factors, powers and basic rounding as well as simple % and ratio calculations.	I have achieved fluency in simple constructions, loci and transformations.	I have achieved fluency in finding the nth terms of a sequence and solving simple equations.	I have achieved fluency in using Venn diagrams, decimals fractions and % to describe simple probabilities.	Student is beginning to develop their ability to apply their skills to simple questions of reasoning and real-life applications with one or two steps.
	I have achieved fluency in calculating with fractions and % change as well as using simple index rules.	I have achieved fluency in calculating angles in polygons, measures for circles and interpreting scales in diagrams.	I have achieved fluency in expanding and factorising, manipulating simple formulae and plotting functions.	I have achieved fluency in using the data frequency cycle and analysing graph types.	Student is confident in applying their mathematical skills to simple questions of reasoning and real-life applications with one or two steps.
	I have achieved fluency in calculating with direct proportion, using all major operations and interpreting the results in context.	I have achieved fluency in combining transformations, bearings and properties and plans of 3D shapes.	I have achieved fluency in solving complex equations using negatives and fractions and trial and improvement.	I have achieved fluency in using experimental data and constructing tree diagrams to calculate probabilities.	Student is beginning to develop their ability in formulating strategies in problem solving by breaking complex questions into clear steps.
	I have achieved fluency in all rounding methods, using multipliers to calculate % change and finding bounds.	I have achieved fluency in compound units and calculating measures of prisms as well as sector and arc length of circles.	I have achieved fluency in equations and gradients of linear graphs and familiarity with higher order graphs	I have achieved fluency in analysing graphs of cumulative frequency, box plots and moving averages.	Student is secure in their ability in formulating strategies in problem solving by breaking complex questions into clear steps.
	I have achieved fluency in calculating change and proportions with fractions, using standard form and simple surds.	I have achieved fluency in basic use of Pythagoras theorem, congruence and similarity.	I have achieved fluency in simple algebraic fractions, solving equations with brackets and linear inequalities	I have achieved fluency in calculating probabilities from real life events and using independent events.	Student is beginning to develop the reasoning and application skills to adapt and analyse the content of KS3 to solve questions that are unfamiliar and /or complex.
	I have achieved fluency in using fractions and indices and solving proportional questions in context.	I have achieved fluency in advanced transformations, constructions and Pythagoras in 3D.	I have achieved fluency in simultaneous equations and familiarity with quadratic sequences	I have achieved fluency in choosing the best model to calculate probabilities and represent data graphically.	Student has secured the reasoning and application skills to confidently adapt and analyse the content of KS3 to solve questions that are unfamiliar and /or complex.