



Key Stage 3 Maths Assessment Grid

	A	B	C	D	E	F	G	H	I
Number & Ratio	<ul style="list-style-type: none"> -Recognise and use number bonds to ten. -Recall and use times tables effectively. -Read and write whole numbers and decimals in figures and words. -Understand and use place value correctly. -Apply basic addition and subtraction methods. -Recognise and perform calculations using powers of 10 	<ul style="list-style-type: none"> -Identify factors and multiples of a number. -Select and apply appropriate addition and subtraction methods. -Apply basic addition and subtraction to decimals calculations. -Apply the rules of order of operations to basic calculations -Understand directed numbers -Compare two amounts using a bar models (ratio) 	<ul style="list-style-type: none"> -Understand and compare fractions including equivalence of fractions, decimals and percentages. -Evaluate basic fraction calculations -Select and apply basic addition and subtraction to decimals calculations. -Identify prime factors of a number. -Explain what is meant by HCF and LCM of two numbers -Compare directed numbers -Recognise ratio notation -Round numbers to appropriate decimal place or significant figures. 	<ul style="list-style-type: none"> -Evaluate more complex fraction calculations including mixed numbers -Calculate fractions of an amount. -Use multiplicative reasoning when performing calculations involving fractions. -Use knowledge of percentages to compare two quantities. -Apply the rules of order of operations to complex calculations. -Complete calculations involving directed numbers -Express amounts in ratio form -Recognise notation for powers and roots -Select and appropriate method to determine the HCF and LCM of two numbers 	<ul style="list-style-type: none"> -Evaluate and explain complex fraction calculations including mixed numbers. -Select appropriate method for calculations involving fractions. -Use rounding to estimate a solution. -Recognise what is meant by prime factorisation and justify an appropriate method to determine the HCF and LCM. -Calculate simple percentage increase and decrease problems. -Perform calculations involving ratio. 	<ul style="list-style-type: none"> -Calculate percentage increase and decrease problems. -Understand and apply a multiplier. -Perform more complex calculations involving two part and three part ratios. -Understand the relationship between variables which are directly proportional. -Recognise and use notation for powers and roots 	<ul style="list-style-type: none"> -Understand and apply a multiplier effectively. -Recognise and calculate reverse percentages. -Understand the relationship between variables which are directly or inversely proportional. -Develop methods to estimate complex calculations. -Use knowledge of powers and roots to estimate and solve. 	<ul style="list-style-type: none"> -Recognise and explain methods of calculations involving reverse percentages. -Apply the relationship between variables which are directly or inversely proportional. -Understand and apply a multiplier to calculate compound interest. -Use multiplicative reasoning to scale values (developing bar models) -Apply knowledge of powers of 10 to write in standard form. 	<ul style="list-style-type: none"> -Develop methods for effective problem solving -Justify appropriate methods using reasoning skills -Use mathematical methods in real life problems (best buys, worded ratio)
Algebra	<ul style="list-style-type: none"> -Recognise co-ordinates in 1st quadrant. -Recognise and continue a sequence. 	<ul style="list-style-type: none"> -Solve one step algebraic calculations using function machines. -Represent unknowns pictorially. 	<ul style="list-style-type: none"> -Understand how to collect like terms -Solve two step algebraic calculations using function machines. -Recognise term-to-term rules for a sequence. 	<ul style="list-style-type: none"> -Simplify basic algebraic expressions. -Multiply out brackets, identify and take out common factors to factorise. -Substitute numerical values into expressions. 	<ul style="list-style-type: none"> -Describe the nth term for a sequence. -Solve one step algebraic calculations using bar models. -Form basic algebraic expressions. 	<ul style="list-style-type: none"> -Solve two step algebraic calculations using bar models. -Form more complex algebraic expressions. -Solve equations with unknown on both sides. 	<ul style="list-style-type: none"> -Use multiplicative methods to expand double brackets. -Form and solve linear inequalities -Identify key features of a linear graphs including gradient and y-intercept. 	<ul style="list-style-type: none"> -Recognise the nth term for non-linear sequences including quadratic sequences. -Factorise quadratics for x^2 coefficients equal to one. -Rearrange an expression to find different unknowns including SDT. 	<ul style="list-style-type: none"> -Develop reasoning methods for effective problem solving. -Rearrange an expression to find different unknowns involving powers. -Approximate solutions to algebraic equations using graphs.
Shape	<ul style="list-style-type: none"> -Recognise and name 2D shapes correctly. -Understand basic angle rules for straight lines and around points. 	<ul style="list-style-type: none"> -Recognise and name 3D shapes correctly. -Find lines of symmetry for basic 2D shapes. -Recognise shapes which tessellates. 	<ul style="list-style-type: none"> -Measure angles and lengths accurately. -Convert metric units of length. -Calculate the perimeter of basic and compound shapes. 	<ul style="list-style-type: none"> -Understand what is meant by parallel. -Calculate the areas of basic and compound shapes. -Find the order of rotational symmetry for regular shapes. -Accurately describe and draw a reflection transformation. 	<ul style="list-style-type: none"> -Identify the different types of angles formed by parallel lines and a transversal. -Recognise nets of 3D shapes. -Draw plans and elevations of a given solid. -Accurately describe and draw a translation using a vector. 	<ul style="list-style-type: none"> - Convert area units. - Calculate the area complex 2D shapes including, of trapezia, parallelograms and circles. -Calculate the surface area and volume of 3D solids. -Understand what is meant by congruence. -Accurately describe and draw an enlargement using an integer scale factor. 	<ul style="list-style-type: none"> -Understand the properties of similar shapes. -Use Pythagoras' theorem to find missing sides of right-angles triangles. -Use prior knowledge of triangles to find angles in other polygons. 	<ul style="list-style-type: none"> -Convert volume units -Develop an understanding of the trigonometric ratios. -Accurately describe and draw enlargement using an fractional scale factor. 	<ul style="list-style-type: none"> -Develop reasoning methods for effective problem solving involving shapes. -Accurately describe and draw an enlargement with a negative, fractional scale factor.
Handling Data	<ul style="list-style-type: none"> -Construct and interpret a tally charts. -Read and understand bar charts and pictograms 	<ul style="list-style-type: none"> -Draw accurate bar charts and pictograms. 	<ul style="list-style-type: none"> -Interpret dual and composite bar charts -Understand the basic language used to describe probability 	<ul style="list-style-type: none"> -Interpret a misleading graph. -Place values onto a probability scale. -Calculate basic averages and range pictorially and numerically . 	<ul style="list-style-type: none"> -Input data into a frequency table. -Solve problems involving averages and range. -Use systematic listing to display outcomes of a set. 	<ul style="list-style-type: none"> -Construct a pie chart. -Understand what is meant by bias/unbiased data. -Know the difference between discrete and continuous data. -Organise a set of values into a Venn Diagram 	<ul style="list-style-type: none"> -Describe correlation from a scatter graph. -Understand the relationship between relative frequency and theoretical probability. -Draw an accurate frequency diagram. 	<ul style="list-style-type: none"> -Interpret and compare frequency diagrams. -Understand what is meant by union and intersection of a Venn Diagram. -Calculate the estimate mean from a grouped frequency table. 	<ul style="list-style-type: none"> -Construct a tree diagrams to solve probability problems. -Understand set notation



Key Stage 3 Assessment Pathway Plan

Year 7		
Pathway	Assessment Point 1	Assessment Point 2
Foundation (99-)	A	A-B
Intermediate (100-110)	A-B	B-C
Higher (111+)	B-C	C-D

Year 8		
Pathway	Assessment Point 1	Assessment Point 2
Foundation	B-C	B-C
Intermediate	C-D	D-E
Higher	D-E	E-F

Year 9		
Pathway	Assessment Point 1	Assessment Point 2
Foundation	C-D	C-D
Intermediate	E-F	E-F
Higher	F-G	G-H