

Key Stage 3 Subject Assessment Grid			
Subject: MATHS Year: 7 AUTUMN 1 - Unit: Place Value, Addition and Subtraction, Angle Sums			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: <ul style="list-style-type: none"> Order positive and negative integers Order positive decimals to 2 decimal places Round decimals to the nearest whole number or 1 decimal place Add and subtract negative numbers Add and subtract integers and decimals of any size (with the same number of decimal places) Calculate perimeters of shapes made of rectangles Draw and measure any angle (including reflex) Recognise vertically opposite angles Know the angles at a point, on a straight line and in a triangle 	Secure The student can: <ul style="list-style-type: none"> Order positive and negative decimals (including numbers with a differing number of decimal places) Round decimals to 2 decimal places Add and subtract integers and decimals of any size (including negatives and numbers with a differing number of decimal places) Calculate and use the perimeter of any shape Know and use angles in a quadrilateral Identify alternate and corresponding angles Solve geometrical problems using alternate and corresponding angles justifying answers 	Secure The student can: <ul style="list-style-type: none"> Order any set of numbers (including those written in standard form) Round decimals to an appropriate degree of accuracy (including significant figures) Add and subtract numbers written in standard form Use positive and negative numbers of any size, the laws of arithmetic and inverse operations Solve problems involving perimeter (considering upper and lower bounds) Know and use properties of angles, parallel and intersecting lines, triangles and other polygons Interior and exterior angle sums Solve geometric problems using step-by-step reasoning
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: MATHS Year: 7 AUTUMN 2 - Unit: Multiplication and Division; Multiples and Factors; Applications			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: <ul style="list-style-type: none"> Multiply and divide decimals with one or two decimal places by an integer Multiply and divide negative numbers Recognise square numbers and corresponding square roots Recognise and use HCF and LCM (in simple cases) Use Venn diagrams to depict common multiples and factors Calculate areas of shapes made from rectangles 	Secure The student can: <ul style="list-style-type: none"> Understand the effect of multiplying and dividing numbers by values between 0 and 1 Know and apply BIDMAS (including indices) Use squares, positive and negative square roots, cubes and cube roots, and index notation for small positive integer powers Find the prime factorisation of a number Derive and use formula for the area of a triangle, parallelogram, and trapezium Calculate areas of compound shapes Know rough metric equivalents of imperial measures 	Secure The student can: <ul style="list-style-type: none"> Use positive and negative numbers of any size, the laws of arithmetic and inverse operations including multiplying and dividing decimals by decimals Use index notation for integer powers; know and use the index laws for multiplication and division of positive integer powers Estimate square roots and cube roots Use the prime factorisation of a number Convert between length and area measures Solve problems involving area of compound shapes Find the circumference and area of circles (simple) Exchange rates
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: MATHS Year: 7 SPRING 1 - Unit: Fractions; Percentages; Applications			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: <ul style="list-style-type: none"> Express a smaller number as a percentage or fraction of a larger one Multiply fractions by an integer Use percentages to compare simple proportions Add and subtract simple fractions Convert between fractions, decimals and percentages Calculate fractions and percentages of quantities Interpret simple pie charts 	Secure The student can: <ul style="list-style-type: none"> Multiply and divide fractions Order fractions by writing as equivalents or converting into decimals Add and subtract fractions Use division to convert a fraction to a decimal Increase and decrease an amount by a given percentage Read and draw simple pie charts 	Secure The student can: <ul style="list-style-type: none"> Multiply and divide simple algebraic fractions Simplify or transform algebraic expressions by taking out single-term common factors Add and subtract simple algebraic fractions Convert recurring decimals into fractions Increase and decrease an amount by a given percentage or fraction Use multipliers for percentage change Solve problems with pie charts
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: MATHS Year: 7 SPRING 2 - Unit: Ratio and Proportion; Shape			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
	Secure The student can:	Secure The student can:	Secure The student can:

To be assessed as secure, students must achieve competence in all statements.	<ul style="list-style-type: none"> Use direct proportion in simple contexts Use ratio notation Simplify ratios (including money and time) Divide a quantity into two parts in a simple ratio Understand the link between ratio and proportion Increase and decrease an amount by a given percentage Use 2D shape in ratio problems 	<ul style="list-style-type: none"> Use the unitary method to solve problems involving ratio and direct proportion Simplify ratios, including those in different units Divide a quantity into two or more parts given a ratio Apply understanding of link between ratio and proportion Use 2D and 3D shape in ratio problems 	<ul style="list-style-type: none"> Use proportional reasoning to solve problems, choosing the correct numbers to take as 100%, or as a whole Compare two ratios Simplify ratios, recognising links with fraction notation Calculate ratios in a range of contexts Recognise when fractions or percentages are needed to compare proportions Extend mental methods of calculation with fractions, percentages, and ratios Use 2D and 3D shape in ratio problems
	Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps
	Foundation	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
	Subject: MATHS Year: 7	SUMMER 1 - Unit: Sequences; Algebraic Expressions	
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can:	Secure The student can:	Secure The student can:
	<ul style="list-style-type: none"> Generate terms of a simple sequence, given a rule Describe the general term of a simple sequence Generate sequences from patterns or practical contexts Use iterative processes Use letter symbols to represent unknown numbers or variables Simplify linear algebraic expressions by collecting like terms (numbers and letters) Understand that algebraic operations follow the rules of arithmetic Multiply a single term over a bracket (positive integer coefficients) 	<ul style="list-style-type: none"> Generate terms of a linear sequence using term-to-term and position-to-term rules Use linear expressions to describe the nth term of a simple arithmetic sequence Relate linear sequences to linear functions Explore iterative sequences Use index notation for small positive integer powers Simplify or transform linear expressions by collecting like terms Understand that algebraic operations, including the use of brackets, follow the rules of arithmetic Multiply a single term over a bracket (positive and negative integers) 	<ul style="list-style-type: none"> Generate terms of a linear sequence using term-to-term and position-to-term rules Use linear expressions to describe the nth term of a simple arithmetic sequence Explore quadratic sequences Represent linear sequences graphically Describe a rule for iterative sequences Simplify or transform algebraic expressions by taking out single-term common factors Add simple algebraic fractions Expand two brackets to form a quadratic expression Work with general iterative processes e.g. use systematic trial and improvement methods to find approximate solutions of equations such as $x^3 + x = 20$.
	Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
	Subject: MATHS Year: 7	SUMMER 2 - Unit: Algebraic Manipulation and Linear Graphs	
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can:	Secure The student can:	Secure The student can:
	<ul style="list-style-type: none"> Use simple formulae from mathematics and other subjects Substitute positive integers into simple linear expressions and formulae Construct and solve simple linear equations, e.g. $4a=12$ Construct and interpret graphs and diagrams to represent data, including bar line graphs and frequency diagrams for grouped discrete data Use coordinates in all four quadrants and identify coordinates of points determined by geometric information Represent simple functions using words, symbols and mappings Plot graphs of simple linear functions (y given explicitly in terms of x). 	<ul style="list-style-type: none"> Use formulae from mathematics and other subjects Substitute positive integers into expressions involving small powers Derive simple formulae and in simple cases change subject Express simple functions algebraically and represent them in mappings or on a spreadsheet Generate points in all four quadrants and plot graphs of linear functions (y given explicitly in terms of x), on paper and using ICT Recognise that equations of the form $y = mx + c$ correspond to straight-line graphs Discuss and interpret graphs arising from real situations. 	<ul style="list-style-type: none"> Change the subject of simple formulae Substitute numbers into expressions and formulae Construct and solve linear equations with integer coefficients (unknown on one or both sides, without and with brackets) Represent and solve problems involving constant or average rates of change graphically Generate points and plot graphs of linear functions given explicitly (y given in terms of x) and implicitly (y given implicitly in terms of x, e.g. $ay + bx = 0$, $y + bx + c = 0$) Find the gradient of lines given by equations of the form $y = mx + c$
	Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps