

YEAR 8 MATHS ASSESSMENT GRIS

YEAR 8 TERM 1	Emerging	Developing	Secure	Mastery
Algebraic Notation	Understand key terms	Form and interpret simple expressions	Form and interpret more complex expressions	Turn written descriptions into expressions Work with perimeter algebraically
Collecting Like Terms	Add, subtract, multiply, divide simple terms with prompting	Add, subtract, multiply, divide simple terms confidently	Add, subtract, multiply, divide terms with powers	
Expanding Brackets	Expand a single bracket where all terms are positive	Expand a single bracket including negative terms	Expand a pair of single brackets and collect terms	Expand a single bracket including powers of a variable
Factorising	Identify the highest common factor for two terms	Factorise an expression into a single bracket (numeric factors only)	Factorise an expression into a single bracket (algebraic or numeric factors)	Factorise an expression into a single bracket (multiple numeric, algebraic factors including powers)
Substitution	Substitute positive integers into simple expressions	Substitute positive integers into expressions including powers and roots Substitute negative numbers into simple expressions	Substitute any integer into a given expression	Substitute into formulae in order to solve problems.
Angles	Know and work with basic angle facts (triangle, straight line, point, quadrilateral, vertically opposite)	Know that exterior angles in a polygon sum to 360 Use triangles to find the interior angle sum of a polygon	Calculate interior and exterior angles in a polygon Identify and name alternate, cointerior and corresponding angles	Solve problems with angles in polygons and parallel lines
Area	Area of a Rectangle	Find the area of shapes made from rectangles Find the area of a triangle and parallelogram Solve simple area problems	Find the area of a trapezium Find the area of simple compound shapes Solve problems with area	Find the area of more complex compound shapes using more than one method Solve more complicated area problems, including using simple algebra
Surface Area	Draw the net for a cuboid and label edge lengths	Calculate the surface area of cubes and cuboids	Calculate the surface area of triangular prisms	Calculate the surface area of a compound rectilinear prism

YEAR 8 TERM 2	Emerging	Developing	Secure	Mastery
Circles	Label some parts of a circle	Know the relationship between the circumference and diameter of a circle Label all parts of a circle	Calculate the circumference and area of a given circle	Work with simple sectors Solve area problems involving circles
Volume	Volume of a cuboid	Volume of a triangular prism	Volume of a cylinder Volume of a general prism	Derive the formula for the volume of a cylinder from its net
Solving Equations	Understand the meaning of the equals sign Solve simple equations, using pictorial representations where appropriate	Solve two step equations Draw diagrams to represent equations Write an equation from a simple worded context	Solve double sided equations with integer coefficients Form equations in the context of area and perimeter	Solve equations including fractional, negative and decimal coefficients of x and double sided equations Form and solve equations
Rearranging Formulae	Identify an expression, equation or formula Use a function machine to identify input and output numbers Substitute positive integers into simple formulae	Rearrange formulae using numbers only or with function machines	Rearrange simple formulae algebraically	Rearrange formulae with powers, brackets, fractions
Linear Sequences year 7 term 2	Find the next term in a sequence Use a term to term rule to generate a sequence	Identify different types of sequence Generate a sequence from an nth term rule	Find the nth term rule for a linear sequence Connect linear sequences to straight line graphs	Find the nth term rule for a picture sequence Generate a picture sequence that matches a given nth term rule

YEAR 8 TERM 3	Emerging	Developing	Secure	Mastery
Probability	Use the Probability Scale Read simple probability notation List outcomes for a given situation	Complete a two way table and write down probabilities from it Complete a sample space diagram Calculate probability of a single event	Construct a two way table or sample space diagram using written information Calculate relative frequency	Calculate probabilities from tree diagrams Work out a conditional probability from a two way table Calculate expected frequency
Data	Averages from discrete data (mean, median, mode, range)	Identify and name different types of data	Averages from frequency tables (mean, mode, median, range)	Averages from grouped frequency tables Compare distributions statistically
Constructions and Loci	Construct angles using a protractor Measure angles accurately using a protractor	Construct triangles (SAS, ASA)	Construct triangles (SSS) Bisect a line and an angle Shade basic loci	Construct possible regions and more complex loci