KS3 GRADE DESCRIPTORS

Target Grade: .....

Maths

	Number	Algebra	Ratio & Proportion	Geometry & Measure	Statistics & Probability	Reasoning & Problem Solving
Pre -Foundational	Multiply integers by 10, 100, 1000 Simple mental and written +, −, ×, ÷ Use a number line; Order whole numbers	Uses diagrams to spot patterns in a sequence	Works with simple fractions and percentages with substantial guidance	Perimeter of simple shapes Area by counting squares Names 2D and 3D shapes	Uses probability vocabulary (likely, equally likely, fair, unfair, certain) Can identify Mode and range	Very limited reasoning; needs step-by-step guidance
Foundational	Place value; compare integers and decimals Estimate numbers Interpret real-life tables (timetables, distance tables) and the calendar	Introduction to algebraic conventions Co-ordinates Find missing terms in simple sequences	Ratio notation Simple percentages and fractions with guidance	Geometric definitions Parallel and perpendicular lines Triangles, quadrilaterals, polygons Symmetry; congruent shapes	Probability scale Bar charts, line graphs, pictograms, frequency trees	Shows some reasoning but needs support to explain methods and for multi-step problems
Emerging	Add and subtract integers and decimals; inverse operations Fractions: as division, equivalent, simplifying, on number lines Factors, multiples, primes Intro to powers/indices; ×÷ by powers of 10	Recognise and represent sequences Function machines Collect like terms Equality and equivalence	Introduction to ratio; simplify ratios Introduction to percentages Value for money Introduction to proportion	Properties and nets of solids Angles on a line and at a point Measure and draw angles and triangles Reflections, rotations, translations Rotational symmetry	Averages and range; frequency tables Discrete and continuous data; two-way tables Sets, Venn diagrams, Interpret pie charts, line graphs, multiple bar charts	Needs guidance in multi-step problems Solves familiar problems with some support
Developing	Negative numbers Fractions: of amounts, +, −, ×, ÷, mixed/improper, reciprocals Percentages of amounts BIDMAS; HCF, LCM, prime factorisation Squares, roots, cubes; intro to indices Estimate; round to significant figures; financial maths	Solve linear equations; Formulae, expressions, identities; substitution Expand single brackets; factorise Straight-line graphs and gradient; quadratic graphs Change subject of a formula	Ratio n:1 and 1:n; divide into a ratio; ratio and fractions Direct proportion and conversion graphs; Scale diagrams, maps, scale factors Percentage increase/decrease; repeated and reverse percentages; simple interest	Angles in parallel lines, triangles, quadrilaterals, polygons Area of 2D shapes; circle circumference and area Surface area and volume Metric conversions Equation of a line; mid-points; bearings; plans and elevations	Venn diagrams and probability; complement of a set Choose the best average; Scatter graphs, correlation, outliers Pie charts; stem and leaf; Compare distributions	Shows clear reasoning and explains methods Works methodically through familiar problems; multi-step with prompting
Secure	Laws of indices; index notation Standard form and calculations Simple and compound interest Convert metric units of area and volume	Expand and simplify brackets Form and solve equations; rearrange formulae Form and solve inequalities; number lines Simultaneous equations graphically	Compound units; rates of change Best buy; ratio and algebra problems Inverse proportion and its graphs Distance-time graphs Similar shapes	Enlargement and scale factor Constructions: perpendicular bisector, angle bisector, perpendiculars Congruent triangles Pythagoras' theorem and basic trigonometry	LCM/HCF using Venn diagrams Probabilities from Venn diagrams Relative frequency; expected outcomes Independent events Represent and interpret grouped data	Explains solutions and methods clearly and confidently Solves multi-step problems with minimal prompting Connects algebra, geometry and proportion in familiar contexts
Advanced	Fluent with indices, standard form and compound interest in unfamiliar multi-step problems	Solves quadratic equations Solves simultaneous equations algebraically Simplifies algebraic fractions independently Solves complex algebraic problems	Proportional reasoning in a wide range of contexts Direct and inverse proportion Compound measures such as speed and density	Applies Pythagoras' theorem and trigonometry to a variety of problems Advanced geometric reasoning Surface area and volume of complex 3D shapes	Applies probability and data skills to unfamiliar contexts, justifying conclusions	Communicates complex ideas with precise language and notation Solves unfamiliar multi-step problems independently Shows mastery across algebra, geometry and proportion