

<u>Kings Level</u>	<u>2D Shapes</u>	<u>Coordinates</u>	<u>Expressions and Equations</u>	<u>Factors, Multiples and Primes</u>	<u>Measures</u>	<u>Number Sense and Calculations</u>	<u>Perimeter and Area</u>
<u>Kings 1</u>	Recognise and name circles, squares, triangles, rectangles Describe sides and corners Sort shapes by properties Identify shapes in the environment Draw basic 2D shapes	Describe position with words Follow simple directions Place objects in rows/columns Use numbers to label position Recognise grids	Recognise missing number problems Understand balance in equations Use objects to represent unknowns Complete simple equations Describe number patterns	Count in 1s, 2s, 5s, 10s Recognise equal groups Understand repeated addition Identify odd/even numbers Use arrays to represent groups	Compare and describe length, height, weight Use language of mass, volume and capacity Measure using non-standard units Know days of the week Recognise coins up to £2	Count forwards and backwards within 20 Read and write numbers to 20 Add and subtract within 10 Use +, - and = Understand tens and ones	Understand length around a shape Compare sizes of shapes Measure with informal units Talk about 'space inside' a shape Recognise equal sides
<u>Kings 2</u>	Identify 2D shapes on surfaces Count sides and corners accurately Describe regular vs irregular shapes Recognise symmetry in shapes Combine shapes to make new ones	Describe position using first quadrant grid Plot points using numbers Follow simple routes on a grid Use directional language accurately Draw paths between points	Use letters to represent unknowns Write simple expressions Identify equal expressions Find missing numbers Use simple substitution	Recognise multiples of 2, 5, 10 Understand simple division as sharing Find half or double small numbers Recognise commutativity of \times and \div Identify patterns in tables	Measure length and mass using rulers and scales Compare and order objects by size Use simple units (cm, g, ml) Tell time to quarter hour Recognise notes up to £20	Count in 2s, 5s and 10s Use number bonds to 20 Add and subtract within 50 Recognise odd and even numbers Compare and order numbers	Measure and record perimeters with standard units Find area using squares Recognise rectangles have equal sides Compare areas by counting squares Describe differences in shape size
<u>Kings 3</u>	Classify shapes by angles and sides Recognise right angles Draw simple polygons Identify symmetry lines Use mathematical language to describe shapes	Plot and name points in one quadrant Describe movement using coordinates Use grid references Recognise axes and origin Identify horizontal and vertical lines	Simplify basic expressions Substitute into expressions Recognise and use inverse operations Form one-step equations Solve by inspection	Know 2, 5, 10, 3 and 4 times tables Recognise factor pairs Understand divisibility Use multiplication to check division Identify multiples within 50	Measure using standard units accurately Add and subtract lengths/masses Use litres and kilograms Read time to 5 minutes Recognise equivalence in money	Use place value to 100 Add and subtract two-digit numbers Know multiplication facts for 2, 5, 10 Divide using sharing Recognise halves and quarters	Calculate perimeter of rectangles Estimate area by counting squares Distinguish area and perimeter Use cm^2 as a unit Compare and order by size
<u>Kings 4</u>	Identify types of triangles and quadrilaterals Use rulers to draw shapes accurately Identify parallel and perpendicular lines Recognise rotational symmetry Use co-ordinates to draw shapes	Plot and join points to form shapes Translate shapes on a grid Identify reflections in axes Recognise symmetry on a grid Describe coordinates of vertices	Simplify expressions using like terms Form and solve two-step equations Recognise linear patterns Use inverse operations systematically Test solutions by substitution	Recall and use multiplication facts to 12×12 Identify prime and composite numbers Find factors of given numbers Recognise square numbers Use vocabulary multiple/factor/prime	Convert between cm, m, g, and kg Read time using digital and analogue Find durations of time Estimate and measure perimeters Use basic units of temperature	Add and subtract up to 1000 Recall 3, 4, 8 times tables Use written methods for + and - Understand commutativity Recognise simple fractions	Use formulas for area of rectangles and triangles Find perimeter of compound shapes Work with composite areas Solve simple missing side problems Understand relationship between area and perimeter
<u>Kings 5</u>	Compare and classify geometric shapes Identify and estimate angles Use correct notation for angles Describe properties of polygons Find missing angles on a straight line	Work with all four quadrants Reflect shapes in both axes Translate and describe movements Recognise invariance under transformation Describe co-ordinates after translation	Expand single brackets Factorise simple expressions Solve equations with brackets Form equations from word problems Use function machines	Find common factors and multiples Recognise prime factorisation Use product of primes Simplify using common factors Understand HCF and LCM	Convert between units of measure Solve time problems Measure area using cm^2 Understand perimeter vs area Use compound units (speed, rate)	Multiply and divide two-digit numbers Recognise equivalent fractions Use factors and multiples Round to the nearest 10 or 100 Estimate answers	Calculate area of parallelograms and triangles Solve compound perimeter problems Estimate surface areas Compare efficiency using area Use accurate measurements
<u>Kings 6</u>	Construct triangles and quadrilaterals accurately Recognise interior/exterior angles Use angle facts to solve problems Identify congruent shapes Understand angle sum of polygons	Plot linear graphs using coordinates Identify coordinates from graphs Find midpoints between coordinates Use scale and gradient understanding Interpret points on coordinate plane	Simplify expressions with powers Expand double brackets Factorise quadratics ($x^2 + bx + c$) Solve linear equations with unknowns both sides Plot simple linear equations	Use Venn diagrams for factors and multiples Apply HCF/LCM to solve problems Recognise powers and roots Work with cube and square numbers Understand divisibility tests	Calculate perimeter and area of rectangles and triangles Convert between metric units Estimate and compare capacities Work with scale drawings Understand compound measures	Use all times tables to 12×12 Add/subtract decimals Order and compare fractions Find fractions of amounts Use inverse operations	Apply formulas for area of trapeziums Find perimeters of irregular shapes Work with area in real-life contexts Solve algebraic area problems Use scale drawings for area/perimeter
<u>Kings 7</u>	Use angle facts in polygons and parallel lines Apply knowledge to find unknown angles Construct shapes using compasses and protractors Identify symmetry and congruence Understand properties of circles	Construct linear and non-linear graphs Find intersections and midpoints Recognise parallel and perpendicular gradients Plot distance-time graphs Interpret real-world data on graphs	Solve simultaneous equations graphically Simplify algebraic fractions Rearrange formulas Use substitution in formulas Identify and use expressions for sequences	Simplify ratios using HCF Work with powers of numbers Find LCM and HCF in problem contexts Use factorisation to simplify expressions Apply knowledge to algebraic contexts	Solve problems with compound units Convert between metric and imperial units Find surface area of cubes and cuboids Use scale factors in measures Work with rates of change	Multiply/divide decimals by integers Use BIDMAS in calculations Convert between fractions, decimals and percentages Work with negative numbers Use estimation in problem solving	Calculate surface area of 3D shapes Compare perimeters at scale Work with conversions between m^2 and cm^2 Apply area and perimeter to design problems Estimate missing dimensions
<u>Kings 8</u>	Apply Pythagoras' Theorem in 2D shapes Understand trigonometric ratios Find missing sides/angles in right triangles Construct accurate geometric diagrams Use circle theorems in context	Plot and interpret quadratic graphs Identify turning points Recognise symmetry in parabolas Find intercepts from graphs Interpret graphs in context	Factorise complex quadratics Complete the square Solve quadratic equations Form and use nth term rules Solve inequalities on number lines	Use prime factorisation to find roots and indices Solve problems involving LCM and HCF Work with index notation confidently Apply divisibility and remainder reasoning Use factors in algebraic proofs	Calculate volume of prisms and cylinders Solve real-life measure problems Use formulae for area and volume Convert between cm^3 and m^3 Apply density, speed and pressure formulas	Apply ratio and proportion in calculations Calculate with powers and roots Simplify complex fractions Use standard form Solve percentage increase/decrease problems	Calculate area of circles Find perimeters of arcs and sectors Solve real-world area problems Use π accurately in calculations Work with compound 2D area problems
<u>Kings 9</u>	Prove geometric relationships Apply trigonometry in real problems Use advanced circle theorems Calculate missing lengths and angles using geometry Link algebra to geometry in problem solving	Use graphs to solve equations Interpret non-linear and piecewise graphs Find gradient from curve tangents Model situations using graphs Analyse transformations of graphs	Solve simultaneous equations algebraically Use quadratic formula Solve inequalities graphically Rearrange complex formulae Interpret real-world algebraic models	Apply index laws with fractional/negative powers Use prime decomposition in algebraic contexts Model problems using factors and multiples Solve simultaneous problems with multiples Recognise patterns using modular arithmetic	Work with complex compound units Solve multi-step problems involving area, volume, and density Apply scale factors in 3D Use exact values of π Model real-world measure problems	Manipulate surds and indices Use fractional and negative powers Apply proportional reasoning Solve multi-step percentage and ratio problems Work fluently with recurring decimals	Apply area and perimeter in algebraic and geometric proofs Solve complex compound shape problems Link surface area and volume Model real contexts with formulas Evaluate accuracy and rounding effects