

Stage 7		How am I doing?					
		Au 1	Au 2	Sp 1	Sp 2	Su 1	Su 2
Numbers & Number system	Use the concepts and vocabulary of prime numbers, factors (divisors), multiples, common factors, common multiples, highest common factor and lowest common multiple						
	Use positive integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5						
	Recognise and use sequences of triangular, square and cube numbers, simple arithmetic progressions						
C&C	Order positive and negative integers, decimals and fractions						
	Use the symbols =, ≠, <, >, ≤, ≥						
Exploring & calculating FDP	Express one quantity as a fraction of another, where the fraction is less than 1 or greater than 1						
	Define percentage as 'number of parts per 100'						
	Express one quantity as a percentage of another						
	Apply the four operations including formal written methods, to simple fractions (proper and improper), and mixed numbers						
	Interpret % and % changes as a fraction or a decimal, and interpret these multiplicatively						
	Compare two quantities using percentages solve problems involving percentage change, including percentage increase / decrease						
Calculating	Understand and use place value (e.g. when working with very large or very small numbers, and when calculating with decimals)						
	Apply the four operations, including formal written methods to integers and decimals						
	Use conventional notation for priority of operations, including brackets						
	Recognise and use relationships between operations, including inverse operations (e.g. cancellation to simplify calculations and expressions)						
Visualising Constructing	Use conventional terms and notations: points, lines, vertices. Edges, planes, parallel lines, perpendicular lines, right angles, polygons, regular polygons and polygons with reflection and/or rotation symmetries						
	Use the standard conventions for labelling and referring to the sides and angles of triangles						
	Draw diagrams from written descriptions						
IP of S	Identify properties of the faces, surfaces, edges and vertices of: cubes, cuboids, prisms, cylinders, pyramids, cones and spheres derive and apply the properties and definitions of: special types of quadrilaterals, including square, rectangle, parallelogram, trapezium, kite and rhombus; and triangles and other plane figures using appropriate language						
Measuring space	Use standard units of measure and related concepts (lengths, area, volume/capacity, mass, time, money, etc).						
	Use standards units of mass, lengths, time, money and other measures (including standard compound measures) using decimal quantities where appropriate						
	Change freely between related standard units (e.g. time, lengths, area, volume/capacity, mass) in numerical contexts measure line segments and angles in geometric figures						
M D	Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through appropriate measures of central tendency (median, mean, mode and modal class) and spread (range)						
PR	Use ratio notation including reduction to the simplest form divide a given quantity into two parts in a given part:part or part:whole ratio						
Algebraic Proficiency: Tinkering	Understand and use the concepts and vocabulary of expressions, equations, formulae and terms						
	Use and interpret algebraic notation, including: ab in place of $a \times b$, $3y$ in place of $y + y + y$ and $3 \times y$, a^2 in place of $a \times a$, a/b in place of $a \div b$, brackets						
	Simplify and manipulate algebraic expressions by collecting terms and multiplying a single term over a bracket where appropriate						
	Interpret simple expressions as functions with inputs and outputs substitute numerical values into formulae and expressions						
	Use conventional notation for priority of operations						
P D	Interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data and know their appropriate use						
C A & E	Estimate answers; check calculations using approximation and estimation, including answers obtained using technology						
	Recognise and use relationships between operations including inverse operations (e.g. cancellation to simplify calculations and expressions)						
Mathematical movement	Work with coordinates in all four quadrants						
	Understand and use lines parallel to the axes, $y = x$ and $y = -x$						
	Solve geometrical problems on coordinate axes						
	Identify, describe and construct congruent shapes including on coordinate axes						
	Identify, describe and construct congruent shapes including on coordinates axes, by considering rotation, reflection and translation						
	Describe translations as 2D vectors						
Calculating shape	Use standard units of measure and related concepts (lengths, area, volume/capacity)						
	Calculate perimeters of 2D shapes						
	Know and apply formulae to calculate area of triangles, parallelograms, trapezia						
	Calculate surface area of cuboids						
	Know and apply formula to calculate volume of cuboids						
	Understand use standard mathematical formulae						
S E & I	Recognise and use relationships between operations, including inverse operations (e.g. cancellation to simplify calculations and expressions)						
	Solve linear equations in one unknown algebraically						
IA	Apply the properties of angles at a point, angles at a point, angles at a point on a straight line, vertically opposite angles						
PS	Generate terms of a sequence from a term to term rule						