

Stage 9		How am I doing?					
		Au 1	Au 2	Sp 1	Sp 2	Su 1	Su 2
Calculating	Calculate with roots, and with integer indices						
	Calculate with standard form $A \times 10^n$, where $1 \leq A < 10$ and n is an integer						
	Use inequality notation to specify simple error intervals due to truncation or rounding						
	Apply and interpret limits of accuracy						
Visualising & Constructing	Use the standard ruler and compass constructions (perpendicular bisector of a line segment, constructing a perpendicular to a given line from/at a given point, bisecting a given angle)						
	Use these to construct given figure and solve loci problems; know that the perpendicular distance from a point to a line is the shortest distance to the line						
	Construct plans and elevations of 3D shapes						
Algebraic Proficiency: Tinkering	Understand and use the concepts and vocabulary of identities						
	Know the difference between an equation and an identity						
	Simplify and manipulate algebraic expressions by expanding products of two binomials and factorising quadratic expressions of the form $x^2 + bx + c$						
	Argue mathematically to show algebraic expressions are equivalent, and use algebra to support and construct arguments						
	Translate simple situations or procedures into algebraic expressions or formulae						
Algebraic Proficiency: Visualising	Use the form $y = mx + c$ to identify parallel lines						
	Find the equation of the line through two given points, or through 1 point with a given gradient						
	Interpret the gradient of a straight line graph as a rate of change						
	Recognise, sketch and interpret graphs of quadratic functions						
	Recognise, sketch and interpret graphs of simple cubic functions and the reciprocal function $y = 1/x$ with $x \neq 0$						
	Plot and interpret graphs (including reciprocal graphs) and graphs of non-standard functions in real contexts, to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration						
Proportional reasoning	Solve problems involving direct and inverse proportion including graphical and algebraic representations						
	Apply the concepts of congruence and similarity, including the relationships between lengths in similar figures						
	Change freely between compound units (e.g. density, pressure) in numerical and algebraic contexts use compound units such as density and pressure						
Understanding Risk	Calculate the probability of independent and dependent combined events, including using tree diagrams and other representations and know the underlying assumptions						
	Enumerate sets and combinations of sets systematically using tree diagrams						
	Understand that empirical unbiased samples tend towards theoretical probability distributions with increasing sample size						
Solving Inequalities & Equations 1 & 2	Understand and use the concepts and vocabulary of inequalities						
	Solve linear inequalities in one variable						
	Represent the solution set to an inequality on a number line						
	Solve, in simple cases, two linear simultaneous equations in two variables algebraically						
	Derive an equation (or two simultaneous equations), solve the equation (s) and interpret the solution						
Find approximate solutions to simultaneous equations using a graph							
Presentation of data	Interpret and construct tables, charts and diagrams, including tables and line graphs for time series data and know their appropriate use						
	Draw estimated lines of best fit; make predictions						
	Know correlation does not indicate causation;						
	Interpolate and extrapolate apparent trends whilst knowing the dangers of so doing						
Calculating space	Identify and apply circle definitions and properties, including: tangent, arc, sector and segment						
	Calculate arc lengths, angles and areas of sectors of circles						
	Calculate the surface areas of right prisms (including cylinders)						
	Calculate exactly with multiples of π						
	Know the formulae for: Pythagoras' theorem, $a^2 + b^2 = c^2$, and apply it to find lengths in right-angled triangles in two dimensional figures						
Conjecturing	Use the basic congruence criteria for triangles (SSS, SAS, ASA, RHS)						
	Apply angle facts, triangle congruence, similarity and properties of quadrilaterals to conjecture and derive results about angles and sides, including Pythagoras' Theorem and the fact that the base angles of an isosceles triangle are equal, and use known results to obtain simple proofs						
PS	Recognise and use Fibonacci type sequences, quadratic sequences						

My sublevel: Autumn > _____ Spring > _____ Summer > _____