S2 COURSE PLAN

TERM 1 - August to October	Rounding	Significant Figures	Round to a number of significant figures (small and large)
		Accuracy	Accuracy when rounding
	Powers & Roots	Scientific notation in context	Write large and small numbers in Scientific notation/standard form
		Calculations involving scientific notation	Use numbers written in scientific notation within calculations
	Algebra	Distributive law; Simplifying, multiplying and evaluating simple algebraic terms involving brackets.	Multiply out a single bracket, including more than one within an expression e.g., 3(x + 2); x (x - 4); 3(x + 2) - 2 (x + 5)
			Solve an equation with a single bracket.
		Create and evaluate formula contained in diagrams, problems or statements	Make a simple formula from a diagram, problem, or statement.
			Use function notation f(x) for substitution and solving simple equations.
		Inequalities	Introduce inequalities and solve.
	Angles	Angles in 2D shapes, intersecting and parallel lines	Calculate Complementary, Supplementary Angles and Vertically Opposite angles
			On parallel lines calculate - Corresponding (F), Alternate (Z) and Co-interior (C) angles
			Calculate angles inside polygons

TERM 2 - October to December	Circle	Circumference and area of a circle	Introduce pi
			Circumference of a circle using formula - C = Πd or C = 2Πr
			Perimeter of fractions of circles
			Area of a circle using formula - C = Πr²
			Area of fractions of circles
	Scale Drawing & Bearings	Scale drawings	Scale down/up maps or diagrams e.g., circuit board of electronic device
		Bearings	Compass points and 3 figure bearings and use to make scale drawings of journeys
	Pythagoras Theorem	Right angled triangles - Pythagoras	Pythagoras - finding hypotenuse
			Pythagoras - finding smaller side
	Problem Solving	Problem Solving	Problem Solving

TERM 3 - January to March	Data and Analysis	Averages	Calculate mean, median, mode & range and compare data sets
		Statistics	Read data from stem-and-leaf diagrams
			Draw stem-and-leaf diagram
			Draw back-to-back stem-and-leaf diagram
			Five figure summaries
			Box Plots
			Draw scatter graphs given a set of appropriate data
	Algebraic expressions	Working with algebraic expressions involving expansion of brackets	$a(bx+c) + d(ex+f)$
			$ax(bx+c)$
			$(ax+b)(cx+d)$
			$(ax+b)(cx^2+dx+e)$
	Algebra	Factorising - common factor and factorising expressions	Factorise using single bracket
		Factorising an algebraic expression	Common factor
			Difference of 2 squares $p^2x^2 - a^2$
			Common factor with difference of 2 squares
			Trinomials with unitary x^2 coefficient
			Trinomials with non-unitary x^2 coefficient
	Trigonometry	Right angled triangles - Trigonometry	SOHCAHTOA - finding a side given a side and an angle
			SOHCAHTOA - finding an angle given two sides
	Project	Project	Project

TERM 4 - April - May	Circle	Circle: Relationship between radius & tangent	Tangent to a circle
		Angles in semi-circle	Calculate angles in a semi-circle where right-angle is at the vertex on circumference from diameter using angles in triangle add up to 180 degrees.
			Use Pythagoras Theorem to calculate missing side
			Use SOHCAHTOA to calculate missing side or angle
			Relationship in a circle between the centre, chord, and perpendicular bisector
	Patterns and Relationships	Number patterns/sequences	Create simple rule to describe a number sequence e.g., x4+1
			Understand nth term
			Write equation to represent sequence in relation to its position in the sequence.
			Substitute given term to calculate answer or answer to calculate term