

TBS Curriculum Map

Year: ...10 (Grades 1-7 SoW)....

Subject: ...Mathematics.....

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Theme/Topic	Inequalities and formulae. Number Skills Review Polygons Simultaneous Equations	Trigonometry Quadratic Equations Compound measures Surds	Advanced inequalities Advanced surds Congruence and Similarity Probability	Arcs and Sectors Upper and Lower Bounds Advanced Data Handling	3D Shapes Recap of Linear and Quadratic Functions	Functions & Identities Algebraic Fractions Iterative Formulae Circle Theorems Advanced Trigonometry
Skills	Solving and representing linear equalities Rearranging formulae. Review fractions, ratio and proportion Angles in polygons. Solving linear simultaneous equations	Use of trig ratios in right angled triangles Forming and solving quadratic equations by factorising, CTS and formula. Use and conversion of compound measures. Combining and simplifying surds.	Solving and plotting inequalities Multiplying, dividing and rationalising surds Identifying and working with congruent and similar shapes. Probability of single and combined events.	Area and Arc Length of Sectors Upper and lower bounds of quantities and calculations. Cumulative frequency curves, box plots and histograms.	Volume and surface area of prisms, pyramids, cones spheres and frustums. Solving linear and quadratic equations. Completing the square. Graphing non-linear functions.	Identify coefficients in identities. Finding composite functions Arithmetic with algebraic fractions Finding terms in an iterative sequence Solve angle problem using circle theorems Equation of a circle Sine and cosine rule and area of triangle
Knowledge	Rearrangement skills as key technique of equation solving. Application of simultaneous equations to find equations of lines	Standard values of trig functions from key triangles. Quadratic formula as result of CTS.	Feasible regions satisfying multiple inequalities Area and Volume scale factors Conditional probability	Estimation of statistics from cumulative frequency curves and histograms. Necessity for frequency density	Use of key formulae. Connection	Application of fractional algorithms to algebraic fractions Proof of key circle theorems. Tangents to circles
Cultural Capital		Application of trigonometry to problem solving in 3D	Use of graphical methods to solve inequations			Construction and form of rigorous proofs
Curriculum overlap						