Barr Beacon School
Curriculum Plan

Mathematics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Integers Rounding BIDMAS Properties of shapes	Algebraic manipulations Data representation Fractions	Algebraic manipulations Fractions Percentages	Averages Angle rules Properties of shapes Graphs	Ratio Time Proportion Transformations	Probability
8	Rounding Data representation Factors, multiples and powers	Algebraic manipulations Fractions	Surface area and volume Percentages Plans and elevations	Graphs Sequences Circles Angle rules	Angle rules Probability Ratio	Ratio Transformations
9	Inequalities Indices Fractions Standard form Factors and multiples	Ratio Plans and elevations Constructions Pythagoras theorem Circles	Circles Data representation Sequences Percentages	Standard form Algebraic manipulations Surface area and volume Trigonometry	Graphs Transformations	Probability Compound measures
10F	*Factors and Multiples* *Best Value and Exchange Rates* *Percentages* *Using a calculator*	Fractions Ratio Standard form Indices Algebraic manipulation	Algebraic manipulation Inequalities Graphs	Co-ordinate geometry Compound measures GCSE Statistics Content Types of data Collecting data Representing Data	GCSE Statistics Content Representing data Statistical calculations Interpreting data	Exam Preparation
10H	*Factors and Multiples* *Best Value and Exchange Rates* *Percentages* *Using a calculator* *Fractions* *Ratio*	Standard form Indices Algebraic manipulation Inequalities Graphs	Compound measures Pythagoras Trigonometry Angle Rules Plans and Elevations Constructions	Circles Surface Area Similarity and Congruence GCSE Statistics Content Types of data Collecting data Representing Data	GCSE Statistics Content Representing data Statistical calculations Interpreting data Statistical distributions	Exam Preparation
11F	*Pythagoras* *Trigonometry* *Bearings* *Angles Rules*	Probability Plans and Elevations Constructions Circles Surface Area and Volume Transformations	Vectors Sequences Algebraic Manipulations Proportion	Exam Preparation	Exam Preparation	Exam Preparation

Barr Beacon School
Curriculum Plan

Mathematics

11H	Indices Bounds Surds Algebraic Manipulations Sequences Transformations	Simultaneous Equations Conditional Probability Similarity Trigonometry Histograms	Graphs Circle Theorems Algebraic Fractions Functions Proof Vectors	Exam Preparation	Exam Preparation	Exam Preparation
12	Algebraic Expressions Equations Inequalities Straight line graphs Quadratic functions Graphs Transformations	Binomial Expansions Trigonometric ratios and graphs Trigonometric identities and equations Circles Algebraic Division Vectors	Vectors Differentiation Exponentials and Logarithms	Integrations Data representation and interpretation Statistical sampling Probability	Statistical hypothesis testing Quantities and units in mechanics Kinematics Forces and Newton's laws	Connected particles Kinematics
13	Trigonometry Algebra Trigonometric functions Trigonometric identities Functions Differentiation	Parametric Equations Probability Normal distribution Hypothesis testing Further differentiation Kinematics Vectors	Proof Integration Sequences and series Force and motion Friction Moments	Hypothesis testing Projectiles Differential equations Numerical methods	Exam Preparation	Exam Preparation

Rationale: Pupils will gain the understanding and knowledge that is required to inspire a passion in problem-solving and mathematics, enabling them to enter the workplace with resilience and transferrable skills.