Curriculum Intent Framework

Subject:	Mathematics
Subject Curriculum Vision:	We aim to foster a culture of curiosity and positivity. Our students know and understand the purposeful and relevant nature of mathematics, developing skills that will encourage them to flourish in today's ever-changing world. Our ambitious curriculum connects with our daily lives; inspiring the next generation of individuals to have positive memories of mathematics.

Core Subject Values:

Dignity and Respect	It is important to foster a culture of respect within the mathematics classroom by ensuring all students are thinking responsibility about how they interact with their peers. Students who are resilient, determined, and respectful creates a positive set of values to apply to all areas of life and helps develop students' character with dignity.
Wisdom, Knowledge and Skills	Mathematics can develop a culture to allow deeper thinking and equip students with the wisdom to reflect, enquire and challenge key mathematical concepts. Students are guided to think critically about problems and develop resilience by being given opportunities to learn from mistakes in various real life situations
Hope and Aspiration	Mathematics can make an important contribution by helping children and young people to make informed decisions and ensures students flourish to be outstanding citizens. We want students to thrive and have a positive outlook towards mathematics, understanding its importance in the ever-changing world
Extra-curricular Provision	Every child has the opportunity to feel the passion and relevance of maths in the 21st century. Students are given the chance to use their maths skills in various competitions.

Key Stage 3 Mathematics Curriculum Map

	AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 1	SPRING TERM 2	SUMMER TERM 1	SUMMER TERM 2
7	Sequences Understand and use Algebraic notation Equality and equivalence.	Place value FDP (rounding) FDP (fractions and decimals)	Solving problems with addition and subtraction. Solving problem multiplication and division Fractions and percentage of amounts	Directed number Fractions	Constructing and measuring Geometric reasoning Preparation for end of year exams	Primes and proof Developing number sense Financial matters
8	Ratio and scale Multiplicative change Multiplying and dividing fractions	Working in the cartesian plane Representing data Probability	Brackets, equations and inequalities Sequences Indices	Fractions and percentage Standard Index form Directed number	Angles in parallel lines and polygons Area of trapezia and circles Symmetry	Preparation for end of year exams. The data handing cycle Measure location Buzz of learning week
9	Ratio, proportion and rates Drawing linear graphs Indices, standard form (Surds H)	Forming Expressions Forming equations Proof and conjecture	Angles and deduction Construction, congruency and Loci 3D shapes and properties	Solving equations and simultaneous equations Maths and money/ percentages	Pythagoras Theorem and trigonometry Transformations and similarity	Preparation for end of year exams Probability Measures of spread Number sense Buzz of learning week Straws

Key Stage 4 Mathematics Curriculum Map

	AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 1	SPRING TERM 2	SUMMER TERM 1	SUMMER TERM 2
10	Percentage and interest Standard form, indices Surd and bounds Sequences	Vectors Loci Equations and inequalities Transformations and similarity	Trigonometry and pythagoras Bearing and angles Graphs Number reasoning	Geometric reasoning Surface Area and volume Plans and elevations Similarity Trigonometry Simultaneous equations	Probability Tree diagrams Statistics and data	Expand and factorising Rearranging equations Preparation for year 10 exams
11	Working with circle angles and area Proportional reasoning ng Non linear Graphs	Algebra Functions and graphs Using graphs Preparation for December PPEs Feedback on December Papers Function and algebra	Algebraic reasoning Geometric reasoning Number sense Show me resources Preparation for March PPEs	Graphs Preparation for March PPES Delving into data	Personalised Curriculum Strengthen through tackling misconceptions identified through topic analysis. Enrich through opportunities for problem solving. Extend through challenging content that goes beyond the curriculum. Preparation for PPES and GCSE examinations throughout the year.	

Key Stage 5 Mathematics Curriculum Map

	AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 1	SPRING TERM 2	SUMMER TERM 1	SUMMER TERM 2
Year 12 Pure	Algebraic Expressions Quadratics Equations and Inequalities Graphs and Transformations	Straight Line Graphs Circles Algebraic Methods	Binomial Expansion Trigonometric Ratios Trigonometric Identities	Vectors Differentiation Integration	Integration Exponentials and Logarithms Year 2 Content Differentiation Algebraic Methods	Revision for PPE Resits
Year 12 Applied	Data Collection Measures of Location and Spread Representations of Data Correlation	Modelling in Mechanics Constant Acceleration Formulae	Probability Statistical Distributions Hypothesis Testing	Forces and Motion Variable Acceleration	Pure Content Covered: Radians Revision	Revision for PPE Resits
Year 12 Further	Algorithms Graphs Route inspection Travelling Salesman	Linear Programming Simplex Critical Path Analysis Complex Numbers	Complex Numbers Argand Diagrams Series Roots of Polynomials Matrices	Matrices Matrix Transformations	Proof by Induction Vectors Volumes of Revolution Revision	Revision for PPE Transportation Problems Allocation Problems
Year 12 Core Maths	Types of data Collecting data Introduction to spreadsheets Statistical Diagrams	Numerical Calculations Percentages Fermi Estimation Representing data Interest rates	Equation of a straight line Collecting and sampling data Normal Distribution	Financial problems Area, perimeter, circumference	Similarity Pythagoras Critical Analysis	Revision for PPE Personal Finance
Feedback	Topic Tests to be completed after each major topic Homework set on MyMaths, DrFrostMaths, Textbook questions Full Paper Assessments in term Spring 2A PPEs June					

Key Stage 5 Mathematics Curriculum Map

	AUTUMN TERM 1	AUTUMN TERM 2	SPRING TERM 1	SPRING TERM 2	SUMMER TERM 1	SUMMER TERM 2
Year 13 Pure	Sequences and Series Trigonometric Functions Trigonometry and Modelling	Parametric Equations Integration	Revision for PPEs Differentiation Functions and graphs	Binomial Expansion Numerical Methods Vectors	Revision	Revision
Year 13 Applied	Regression, Correlation and Hypothesis Testing Conditional Probability	Moments Forces and Friction Projectiles	Revision for PPEs Normal Distribution	Application of Forces Further Kinematics	Revision	Revision
Year 13 Further	Flows in Networks Dynamic Programming	Game Theory Decision Analysis Complex Numbers Series Polar Coordinates	Revision for PPEs Hyperbolic Functions Methods in Calculus Volumes of Revolution Differential Equations Recurrence Relations	Revision	Revision	Revision
Year 13 Core Maths	Review Representing data Graphical representations	Critical Analysis Correlation and Regression	Repayments and credit VAT Limits of Accuracy	Probabilities and estimation Confidence Intervals Income Tax and NI	Critical Analysis Revision	Revision
Feedback	PPEs September/October		PPEs January		Exams May/June	
	Topic Tests to be completed after each major topic Homework set on MyMaths, DrFrostMaths, Textbook questions					

The Bishops' Blue Coat Church of England High School