Key Stage 5 Curriculum Overview 2025-2027

		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 12	Unit description	**Pure Year 1 Chapter 1: Algebra.** Pure Year 1 Chapter 2: Quadratics. Pure Year 1 Chapter 3: Equations and inequalities. **Pure Year 1 Chapter 4: Graphs and Transformations.** Pure Year 1 Chapter 5: Straight Line Graphs. **Pure Year 1 Chapter 8: Binomial Expansion.** Mechanics Year 1 Chapter 8: Modelling.	**Pure Year 1 Chapter 12: Differentiation (12.1 – 12.6).** **Statistics Year 1 Chapter 5 Probability.** Mechanics Year 1 Chapter 9: Acceleration. Pure Year 1 Chapter 13: Integration (13.1 – 13.3) **Pure Year 1 Chapter 7: Algebraic Methods.** Pure Year 1 Chapter 9: Trigonometric Graphs. (9.5). Pure Year 1 Chapter 10: Trigonometric Equations. **Statistics Year 1 Chapter 1: Data Collection.** Pure Year 1 Chapter 11: Vectors.	**Pure Year 1 Chapter 12: Differentiation (12.7 – 12.11).** Mechanics Year 1 Chapter 10: Forces and Motion. **Statistics Year 1 Chapter 2: Location and Spread.** **Pure Year 1 Chapter 14: Exponentials and Logs.** Pure Year 1 Chapter 6: Circles.	**Statistics Year 1 Chapter: Representations.** Pure Year 1 Chapter 13: Integration (13.4 – 13.7). **Statistics Year 1 Chapter 4: Correlation.** Mechanics Year 1 Chapter 11: Variable Acceleration. **Pure Year 1 Chapter 9: Trigonometry (9.1 – 9.4).** Mechanics Year 2 Chapter 5: Forces and Friction. **Statistics Year 1 Chapter 6: Distributions.**	**Statistics Year 1 Chapter 7: Hypothesis Testing.** Pure Year 2 Chapter 1: Algebraic Methods. Mechanics Year 2 Chapter 4: Moments. **Pure Year 2 Chapter 5: Radians (5.1, 5.4 & 5.5).** **Pure Year 2 Chapter 6: Trigonometric Functions (6.1, 6.3 & 6.4).**	**Pure Year 2 Chapter 9: Differentiation (9.1).** **Pure Year 2 Chapter 5: Radians (Arcs) (5.1 – 5.3).** Pure Year 2 Chapter 7: Trigonometric Modelling. (7.1 – 7.4). Pure Year 2 Chapter 9: Differentiation (9.2 – 9.6). **Pure Year 2 Chapter 4: Binomial Expansion.**
	Assessment	Baseline Assessment. Assessment 1 Pure Regular Homework Consolidation Tasks/Exam Questions	Data Set lessons and activities. Regular Homework Consolidation Tasks/Exam Questions	Assessment 2 Pure Data Set lessons and activities. Regular Homework Consolidation Tasks/Exam Questions	Assessment 3 Applied Data Set lessons and activities. Regular Homework Consolidation Tasks/Exam Questions	Data Set lessons and activities. Regular Homework Consolidation Tasks/Exam Questions	End of Year Assessment Pure and Applied. Regular Homework Consolidation Tasks/Exam Questions
	Challenge	Senior Maths Challenge for all. Use of Challenge Questions in the textbook. Christmas Lecture. All students will be taught the content but should challenge themselves to complete all exercises from the book, particularly the exam style and challenge questions.					
	Inclusion	Identified students will be given a range of support, including small group intervention, Maths Help, additional resources purchased. Use of Integral to consolidate weaker areas.					

Key Stage 5 Curriculum Overview 2025-2027

		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 13	Unit description	**Statistics Year 2 Chapter 2: Conditional Probability.** Pure Year 2 Chapter 9: Differentiation (9.8 – 9.9). Mechanics Year 2 Chapter 7: Application of Forces. **Pure Year 2 Chapter 3: Sequences and Series.**	**Statistics Year 2 Chapter 1: Regression, Correlation and Hypothesis Testing.** **Pure Year 2 Chapter 2: Functions and Graphs.** **Pure Year 2 Chapter 12: Vectors.** Pure Year 2 Chapter 11: Integration. (11.1 – 11.6). Pure Year 2 Chapter 9: Rates of Change (9.10).	**Pure Year 2 Chapter 10: Numerical Methods.** **Statistics Year 2 Chapter 3: The Normal Distribution.** Pure Year 2 Chapter 11: Differential Equations (11.10 – 11.11). Mechanics Year 2 Chapter 6: Projectiles.	**Pure Year 2 Chapter 8: Parametric Equations.** Pure Year 2 Chapter 9 and 11: Parametric Calculus (9.7 and 11.8). Mechanics Year 2 Chapter 8: Further Kinematics.	Structured Revision until exam leave : - Topic reviews based on mock QLA and frequency of topics. - Examination paper practice. - Timed Questions. - Data Set reviews.	
	Assessment	Assessment 1 Pure Retrieval Tasks Regular Homework Consolidation Tasks/Exam Questions	Assessment 2 Applied Retrieval Tasks Data Set lessons and activities. Regular Homework Consolidation Tasks/Exam Questions	Mock Exams Retrieval Tasks Regular Homework Consolidation Tasks/Exam Questions	Additional Mock Retrieval Tasks Regular Homework Consolidation Tasks/Exam Questions	A-Level Examinations	
	Challenge	Senior Maths Challenge opportunity. Use of Challenge Questions in the textbook. Christmas Lecture. All students will be taught the content but should challenge themselves to complete all exercises from the book, particularly the exam style and challenge questions.					
	Inclusion/ Catch Up	Identified students will be given a range of support, including small group intervention, Maths Help, additional resources purchased. Use of Integral to consolidate weaker areas.					

>Something More?

Curriculums at BSS are designed to nurture not only intellectual and physical development but also the spiritual growth of students. This will be through:

Encouraging students to reflect on their experiences, beliefs and purpose and to contemplate the big Questions of Who am I? Why am I here? What is my purpose?

Highlighting extraordinary people, events, and discoveries that inspire awe or investigates how a sense of awe has led to breakthroughs and creativity.

Using art, music, literature, and nature to inspire awe, wonder, and spiritual insight.

Encouraging creative expression to connect with the inner self and the transcendent.

Fostering a sense of belonging and interconnectedness with others, nature, and the universe.

Encouraging self-awareness, emotional intelligence, and moral reasoning.

Promoting open-ended investigations rather than just seeking right answers.

Using hands-on activities, field trips and experiments to immerse students in learning and evoke wonder.

How does our curriculum do >Something More?

1. Faith in Mathematical Order, Wonder, and Human Potential

The curriculum nurtures a form of intellectual and spiritual faith by revealing the deep order and coherence within mathematics. Through the study of sequences, index laws, prime numbers, and structures like Pascal's triangle and fractals, students encounter patterns that mirror the elegance and intricacy of the natural world. Exploring infinite number sets and the recurrence of mathematical forms in nature fosters a sense of awe and wonder, suggesting an underlying unity in the universe. The emphasis on abstract thinking and problem-solving builds confidence in the human capacity to reason and discover, while the construction of rigorous proofs—such as those involving irrational numbers or Fibonacci relationships—can feel like uncovering timeless truths. This journey through mathematical thinking cultivates a reverent appreciation for the power of logic and the beauty of intellectual discovery.

2. Truth, Justice, and Responsibility Through Ethical Reasoning and Real-World Application

Mathematics is a discipline grounded in truth, and the curriculum emphasizes this through logical reasoning, exact calculation, and the interpretation of universal principles. Students engage in formal proof techniques, explore the properties of number systems, and interpret complex functions, all of which reinforce the pursuit of objective truth. Simultaneously, the curriculum promotes justice and responsibility by teaching students to represent data fairly, recognize misleading information, and critically evaluate statistical claims. Topics such as financial literacy, risk analysis, and resource optimization empower students to make informed, ethical decisions. They also learn to critique data collection methods and understand the limitations of mathematical models, fostering intellectual humility and accountability. This integration of truth-seeking with ethical application prepares students to use mathematics as a force for fairness and integrity in the wider world.

3. Compassion Through Understanding Human and Societal Realities

Though often seen as abstract, mathematics becomes a tool for compassion when applied to real-world contexts that reflect human experiences. The curriculum encourages students to analyse population pyramids, birth and death rates, and standardized rates of change—offering insights into demographic trends and societal challenges. By interpreting graphs related to speed, health, and economic activity, and solving problems involving compound measures, students begin to see the human stories behind the data. Mathematical modelling of natural and societal phenomena—such as tides, sunlight, population growth, and decay—connects abstract concepts to lived realities. These experiences help students develop empathy and a deeper understanding of the world around them, encouraging a thoughtful, compassionate engagement with the issues that shape communities and lives.

-