



Overall Curriculum Aim:

To develop all students as creative mathematicians who can apply, reason, question, challenge and be successful

Scheme for Learning

Curriculum Area – Maths

Overview – Year 9 Maths 2021-22

Personnel Responsibility – Mr D Albon (Curriculum Director)

Quality Assured by – Mr C Mills (VP)

Exam Board/Qualification at KS4 – Edexcel 1MA1

Assessment Cycle	Topic/Unit Title – Big Question	Rationale/Skill Development	Link to Assessment Objectives/Progression Scales Skills The following areas will be assessed
1	How can mathematics help you make better decisions?	Students will gain an insight into probability and statistics and how they can be used in real-life situations. They will also build on previous work with percentages, developing the effectiveness of their calculator use. The topics covered will be essential base-knowledge for more in depth study at GCSE.	<p>Securing/Acquiring various Statistical and Probability skills.</p> <ul style="list-style-type: none"> • Using two-way tables. • Understanding Venn diagrams and set notation. • Using probability tree diagrams. • Percentage increase and decrease using a multiplier. • Calculating reverse percentages. • Finding averages from a frequency table. • Finding averages from a grouped frequency table.
2	Can mathematics simplify complicated questions?	Students will develop and build on key skills they have previously studied in algebra. Students will develop their knowledge of indices and standard form with links to future career application. They will also develop their understanding of solving increasingly difficult equations and rearranging formulae. The topics covered will be essential base-knowledge for more in depth study at GCSE.	<p>Securing/Acquiring various Number and Algebra skills</p> <ul style="list-style-type: none"> • Using Laws of indices. • Writing numbers and calculating in standard form. • Solving multi-step linear equations. • Solving equations with unknowns on both sides. • Rearranging formula. • Multiplying out / expanding brackets.
3	Why are triangles such powerful shapes?	Students will develop an understanding of a wide range of key skills linked to algebra and geometry. Students will be introduced to Pythagoras' Theorem and Trigonometry and their links to future career application. The topics covered will be essential base-knowledge for more in depth study at GCSE.	<p>Securing/Acquiring various Algebra and Geometry skills</p> <ul style="list-style-type: none"> • Calculating missing sides of a right-angled triangle using Pythagoras' Theorem. • Calculating missing sides and angles of a right-angled triangle using trigonometry. • Understanding similarity and congruence. • Bearings. • Drawing and describing enlargements.
4	Is there anything left to solve?	Students will develop an understanding of a wide range of key skills linked to graphs. Students will build on previous learning about real life and distance time graphs, making cross curricular links. Students will also refine their understanding of linear graphs and be introduced to quadratic equations and graphs. This unit also has some time set aside to explore personal financial math's including household budgeting. The topics covered will be essential base-knowledge for more in depth study at GCSE.	<p>Securing/Acquiring various Number and Algebra skills</p> <ul style="list-style-type: none"> • Real life and distance time graphs. • Linear graphs • Quadratic equations and graphs • Factorising • Functional / Financial maths • Financial applications.