## Fareham Academy Maths Overview – Year 10 Higher



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic(s)	Number and algebra	Algebra, number, statistics and geometry	Algebra and geometry	Algebra, geometry and probability	Algebra, proportion and geometry	Statistics and revision
Topic Objectives	Consolidate and develop fluency of core number topics.  Consolidate algebraic manipulation and develop understanding of equations.	Investigate iteration.  Consolidate fraction, decimal and percentage conversions and calculations.  Recap statistical diagrams and angles.	Apply linear graph skills to high-grade topics.  Develop knowledge of geometric properties and constructions.	Recap combination of transformations.  Evaluate methods of solving quadratic and simultaneous equations.  Evaluate probability diagrams.	Develop inequalities skills.  Introduce direct and inverse proportion.  Evaluate congruence and similarity problems.	Evaluate statistical diagrams and apply knowledge to GCSE problems.  Extend topics relevant to class or individual students.
Acquired Knowledge/Skills	Apply core skills of number and use of calculators. Apply number skills to high-grade topics.  Apply algebraic manipulation around expressions and formula. Apply skills to solving equations of different forms.	Investigate iterative process for growth and decay.  Consolidate fraction, decimal and percentage calculations.  Recap averages and statistical diagrams.  Develop understanding of angles and trigonometry.	Create linear graphs and apply this knowledge to extended problems, including parallel and perpendicular lines.  Develop geometrical properties and constructions; apply this to complex scenarios.	Recap transformations and extend with combinations.  Evaluate different methods of solving quadratic and simultaneous equations.  Develop knowledge of representing probability diagrams and apply these effectively to scenarios.	Recap inequalities and develop understanding of plotting inequalities.  Apply compound measures and introduce direct and inverse proportion.  Recall congruence and similarity and apply to GCSE scenarios.	Apply knowledge statistical diagrams to GCSE problems.  Reconsolidate understanding of any topics diagnosed throughout year as needing revision.
Assessments	Mock Exam: Number and algebra	Mock Exam: Algebra, number, statistics and geometry	Mock Exam: Algebra and geometry	Mock Exam: Algebra, geometry and probability	Mock Exam: Algebra, proportion and geometry	End of year Mock Exam