





Archdiocese of Liverpool

## Curriculum intent:

It is the intention of St Gregory's Mathematics department to deliver a curriculum that will develop the skills set out in the National curriculum and promote an appreciation of Mathematics as a creative and highly interconnected discipline providing the solution to some of history's most intriguing problems. Aiming to provide students with a sense of enjoyment and curiosity about the subject together with an appreciation of the beauty and power of Maths in different cultures.

We endeavour to provide support across a range of subjects with an emphasis on problem-solving and developing Mathematical fluency across the whole school curriculum, narrowing gaps that students may have with the basic numeracy skills essential within everyday life.

## Year 11 (F)

|        | Content   | Concepts and Skills   |
|--------|---|---|
| TERM 1 | The Probability Scale, Frequency Trees, Listing Outcomes, Calculating,<br>probabilities, Mutually Exclusive Events, Two-Way Tables,<br>Experimental Probabilities, Possibility Spaces, Venn Diagrams, Simple<br>Tree Diagrams, Harder Tree Diagrams, Using Ratio for Recipe,<br>Questions, Value for Money, Simple Proportion, Exchanging, Money,<br>Sharing using Ratio, Ratios, Fractions and Graphs, Increase/Decrease<br>by a Percentage, Percentage Change, Reverse Percentage Problems<br>Simple Interest, Compound Units, Compound Interest and<br>Depreciation, Plans and Elevations, Bearings, Bisecting an Angle,<br>Constructing Perpendiculars, Draw a Triangle Using Compasses, Loci | <ul> <li>knowledge of core principles</li> <li>application of skills</li> <li>problem solving</li> <li>evaluation</li> <li>group work</li> <li>peer coaching</li> <li>revision skills</li> <li>examination technique</li> </ul> |
| TERM 2 | Simplifying - Addition and Subtraction, Simplifying - Multiplication<br>Simplifying – Division, Expanding Brackets, Simple Factorisation,<br>Substitution, Drawing Quadratic Graphs, Expanding and Simplifying<br>Brackets, Rearranging Simple Formulae, Simultaneous Equations<br>Graphically, Factorising and Solving Quadratics, The Difference of<br>Two Squares, Roots and Turning Points of Quadratics, Cubic and<br>Reciprocal Graphs, Simultaneous Equations Algebraically  | <ul> <li>knowledge of core principles</li> <li>application of skills</li> <li>problem solving</li> <li>evaluation</li> <li>group work</li> <li>peer coaching</li> <li>revision skills</li> <li>examination technique</li> </ul> |
| TERM 3 | Comparing Fractions, Adding and Subtracting Fractions<br>Finding a Fraction of an Amount, Multiplying Fractions<br>Dividing Fractions, Reciprocals, Working with Indices<br>Standard Form, Index Notation, Negative Indices, Tessellations and<br>Congruency, Similar Shapes, Congruent triangles, Introduction to<br>Vectors   | <ul> <li>knowledge of core principles</li> <li>application of skills</li> <li>problem solving</li> <li>evaluation</li> <li>group work</li> <li>peer coaching</li> <li>revision skills</li> <li>examination technique</li> </ul> |

