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| Programme of Study  Subject: Maths  Year 11C: | | |
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|  | **Autumn 1** | |
| **Equations and Inequalities:**  **Linear equations including worded problems, Solving simultaneous equations via the elimination method.**  **Solving simultaneous equations via substitution, Worded problems involving simultaneous equations**  **Linear inequalities, Graphical inequalities.**  **Graphical inequalities, Trial and Improvement**  **Counting, Accuracy, Powers and Surds:**  **Rational numbers, reciprocals, terminating and recurring decimals, Estimating powers and roots.** | |  |
|  | **Autumn 2** | |
| Counting, Accuracy, Powers and Surds:Negative and fractional powers, SurdsSurds, Limits of Accuracy and their limitations, Choices and outcomesQuadratic Equations:Plotting quadratic equations, Solving quadratic equationsImportant points and characteristics of a quadratic curve, Simultaneous EquationsSimultaneous Equations, Quadratic inequalities | |  |
|  | **Spring 1** | |
| **Sampling and More Complex Diagrams:**  **Sampling, Frequency polygons, Cumulative frequency graphs, Box plots, Histograms**  **Combined Events:**  **Addition Rules for outcomes of events, Combined events, Tree diagrams, Independent events, Conditional probability**  **Properties of Circles:**  **Circle theorems, Cyclic quadrilaterals, Tangents and chords**  **Alternate Segment Theorem** | |  |
|  | **Spring 2** | |
| **Variation:**  **Direct proportion, Inverse proportion**  **Triangles:**  **Sine and Cosine Rule, Area of a triangle using Sine**  **2D problems involving circle theorems, 3D problems, Trigonometric graphs** | |  |
|  | **Summer 1** | |
| **Graphs:** Distance-time graphs, Velocity-time graphs **Rates of change, Equation of a circle**  **Other graphs, Transformations of the graph** | |  |
|  | **Summer 2** | |
| **Algebraic Fractions and Functions:**  **Algebraic fractions, Changing the subject of a formula, Functions**  **Composite functions, Iteration**  **Vector geometry:**  **Properties of vectors, Vectors in geometry**  **Revision** | |  |