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| Programme of StudySubject: MathsYear 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** |  |