

**Year 10 Curriculum Explained**

Our Maths curriculum intends to develop excellent Mathematicians. This means that they will be able to:

1. Approach problems in a variety of different ways.
2. Follow modelled structures.
3. Communicate effectively as mathematicians.
4. Using a range of numerical skills to problem solve.
5. Critically analyse, identify and correct errors in mathematical workings.
6. Simplify and manipulate algebraic expressions, equations and formulae.
7. Solving linear and quadratic equations using a range of techniques.
8. Convert and solve problems involving fractions, decimals and percentages.
9. Simplify and apply knowledge of ratio and proportion to problem solve.
10. Confidently distinguish between co-ordinates and vectors in appropriate situations,
11. Statistically analyse a range of data sets and graphs
12. Use and apply the formulae for perimeter, area and volume for 2D and 3D shapes.
13. Explore the properties of triangle using Pythagoras and trigonometry encompassing both 2D and 3D shapes.
14. Understand concepts of probability and apply to real life situations.
15. Understand and apply the properties of similar and congruent shapes.

The curriculum enhances mathematical skills obtained in previous years to enable progression to higher level reasoning.