Year 11 Foundation and Higher Tier Curriculum Development

The focus of this year will be addressing students gaps from question level analysis undertaken at several points throughout the year. Students sit 2 GCSE exam papers at the **end of year 10**, a non-calculator paper and a calculator paper at Foundation or Higher tier. The question level analysis breakdown from both papers derives the scheme of work and topics taught in term 1 of year 11. In Week 5 of term 1 of year 11, students take a non-calculator exam in the sports hall under exam conditions, followed by a subsequent linked calculator paper for their Mini Mock in November. The question level analyses from both exam sittings derives the topics taught in the term after the exam sitting. Students sit the third paper from this exam series (the other calculator paper) in week 4 of term 3. The breakdown from this, links in with topics taught before the proceeding Mock series in March, which is a sitting of all 3 exam papers. For this Mock series we use the external November GCSE's that won't be online anywhere. Throughout year 11 students will be exposed to multi- content and multi-step problems in mathematical and non-mathematical contexts, also using the Corbett Maths 5 a day questions as an introduction to each lesson.

Students follow the Edexcel Pearson GCSE specification

https://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html

For term 4 and 5, topics are further derived from question level analysis of the February/March mock exams from the non calculator and both calculator papers. The 'big hitter' topics listed below for both foundation and higher tier provide opportunities for students to practice and further improve their understanding, in topics that occur most often and provide opportunities for accessing and scoring most marks.

Foundation Tier:
- Transformations-reflection, rotation, enlargement, translation
- Sequences and nth term
- Probability
- Algebraic processing:-Expand, simplify, factorise, solve
- Area and Perimeter
- Percentages, fractions and decimals
- Inequalities and equations
- Standard form
- Simultaneous equations
- Scatter graphs
- Similar triangles
- Straight line graphs
- Pythagoras
- Trigonometry
- Mean from a frequency table
- Area and circumference of a circle

Higher Tier:-
- Transformations-reflection, rotation, enlargement, translation
- Sequences and nth term
- Algebraic processing:-Expand, simplify, factorise, solve
- Standard form
- Cumulative frequency and box plots
- Sine/Cosine rule/area of a triangle
- Algebraic fractions
- Simultaneous equations
- Scatter graphs
- Similar triangles
- Straight line graphs
- Pythagoras and Trigonometry
- Histograms
- Area and circumference of a circle
- Iteration

- Algebraic proof
- Circle Theorems