Curriculum Overview - Spring 2025-26

Year 7	
What are you teaching? Spring 1	**What are you teaching? Spring 2**
Unit 5: Fractions Unit 6: Fractions, decimals and percentages Revision, unit test and review	Unit 7: Introduction to Algebra Unit 8: Coordinates and Graphs Revision, unit test and review
Why have you chosen to teach this unit, and this time?	**Why have you chosen to teach this unit, and this time?**
This is a build on from the Key Stage 2 curriculum to build fluency and helps students to be competent and be able to master topics to come later on the curriculum.	*Students would be competent with pre requisite knowledge so now they would be able to master topics involving using basic computation skills to comprehend these topics*
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	**What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?**
1. *Comparing decimals, fractions and percentages* 2. *Workout and using Fraction of quant* 3. *Adding and subtracting tens and hundreds and the effect on place value.*	1. *Simplify and term and distinguishing between expression, equation, formula and identity* 2. *Identifying and plotting co-ordinates on a graph* 3. *Using and applying algebra in real life*
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	**Is this topic on the National Curriculum?** **Yes** **Will all staff be teaching this unit?** **Yes**

Year 8	
What are you teaching? Spring 1	**What are you teaching? Spring 2**
Unit 7: Calculations with fractions Unit 8: Probability Revision, unit test and review	Unit 9: Algebraic manipulation Unit 10: Solving equations Revision, unit test and review
Why have you chosen to teach this unit, and this time?	**Why have you chosen to teach this unit, and this time?**
This builds on from the year 7 curriculum and helps further develop fluency and mastery in number operations	*Students would be competent with pre requisite knowledge so now they would be able to master topics involving using prior knowledge from keystage 2 and year 7 to master these topics*
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	**What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?**
1. *Working out fractions using the four operations* 2. *Understanding how to calculate probabilities of an event* 3. *Applying and solving problems involving fractions and probabilities*	1. *Manipulate algebraic terms involving the four operations* 2. *Able to solve linear equation* 3. *Applying and solving algebraic manipulations and equations*
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	**Is this topic on the National Curriculum?** **Yes** **Will all staff be teaching this unit?** **Yes**

Year 9	
What are you teaching? Spring 1	**What are you teaching? Spring 2**
Unit 7: 2D shapes Unit 8: 3D shapes Revision, unit test and review	Unit 9: Solving equations Unit 10: Sequences Revision, unit test and review
Why have you chosen to teach this unit, and this time?	**Why have you chosen to teach this unit, and this time?**
This builds on from the year 7 and 8 curriculum and helps further develop fluency and mastery in number operations	*Students would be competent with pre requisite knowledge so now they would be able to master topics involving using prior knowledge from key stage 2, year 7, and year 8 to fully develop and understand these topics.*
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	**What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?**
1. *Recognise 2-D shape and its associated properties* 2. *Recognise 3-D shape and its associated properties* 3. *Applying and solving problems involving 2-D and 3-D shapes*	1. *Identify and solve linear equations* 2. *Recognise patterns and find the nth term of the sequence* 3. *Applying and solving problems involving equations and sequences*
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	**Is this topic on the National Curriculum?** **Yes** **Will all staff be teaching this unit?** **Yes**

Year 10	
What are you teaching? Spring 1	**What are you teaching? Spring 2**
<u>Foundation and Crossover</u> Unit 6: Angles and Bearings Unit 7: Transformations Revision, unit test and review <u>Higher and Extension</u> Unit 6: Similarity and Congruence Unit 7: Complex transformations of shapes Unit 8: Conditional probability Revision, unit test and review	<u>Foundation and Crossover</u> Unit 8: Coordinates and Graphs Revision, unit test and review <u>Higher and Extension</u> Unit 9: Volume and Algebra Unit 10: Bounds and Compound measures Revision, unit test and review
Why have you chosen to teach this unit, and this time?	**Why have you chosen to teach this unit, and this time?**
This builds on from the year 7, 8 and 9 curriculum and helps further develop fluency and mastery in number operations	*Students would be competent with pre-requisite knowledge so now they would be able to master topics involving using prior knowledge from key stage 2, year 7, year 8 and year 9 to fully develop and understand these topics.*
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	**What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?**
1. *Understand and use angle facts to find missing angles* 2. *Understand how to singularly transform 2-D shapes* 3. *To congruent and similar shape problem* 4. *Applying and solving problems involving independent and conditional probabilities*	1. *Able to identify and plot co-ordinates on a graph and solving algebraic problem* 2. *Able to work out compound measures.* 3. *Able to find the Volume and surface area of 3D shapes (application)* 4. *Applying and solving problems involving co-ordinates, compound measures surface area and volume of 3=D shapes.*
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	**Is this topic on the National Curriculum?** **Yes** **Will all staff be teaching this unit?** **Yes**

Year 11	
What are you teaching? Spring 1	**What are you teaching? Spring 2**
<u>Foundation and Crossover</u> Bespoke teaching, based on results of mock examinations Revision, unit test and review <u>Higher and Extension</u> Bespoke teaching, based on results of mock examinations Revision, unit test and review	<u>Foundation and Crossover</u> Bespoke teaching, based on results of mock examinations Revision, unit test and review <u>Higher and Extension</u> Bespoke teaching, based on results of mock examinations Revision, unit test and review
Why have you chosen to teach this unit, and this time?	**Why have you chosen to teach this unit, and this time?**
This builds on from key stage 2 and 3 and year 10 curriculum and helps further develop fluency and mastery in number operations	*Students would be competent with pre-requisite knowledge so now they would be able to master topics involving using prior knowledge from key stage 2, key stage 3 and year 10 to fully develop and understand these topics.*
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	**What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?**
1. *Able to select and use the correct skill to solve a problem* 2. *Able to solve complex problem by using* 3. *Able to check for the reasonableness of their solutions*	*1. Able to select and use the correct skill to solve a problem* 2. *Able to solve complex problem by using* 3. *Able to check for the reasonableness of their solutions*
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	**Is this topic on the National Curriculum?** **Yes** **Will all staff be teaching this unit?** **Yes**

The Maths Curriculum-thread

At Kempton Academy students in Mathematics develop a deepening understanding concepts over time and building on foundational skills from year 7-11 in the following areas;

- Number
- Ratio and Proportion
- Algebra
- Geometry and Measures
- . Probability and Statistic

Our 5-year rich and rigorous scheme of learning ensures that the Maths curriculum is well sequencing to ensure the needed progression starting in Year 7 to 11.

For example in year 7 students are introduced to basic algebraic manipulation, such as solving simple linear equations and understanding expressions and variables. In Year 8, these skills are reinforced and extended as students encounter more complex equations, inequalities, and begin working with quadratic expressions. By Year 9, students are confidently solving quadratic equations, expanding algebraic fractions, and exploring simultaneous equations. At the GCSE level, this foundation enables students to tackle more advanced algebra, including factoring complex quadratic expressions, solving quadratic inequalities, and working with functions.

By the end of their studies, students are equipped to confidently apply these algebraic techniques to real-world problems and theoretical mathematical challenges, reflecting the depth and breadth of their cumulative learning.