Curriculum Overview - Autumn 2026

Year 7	
What are you teaching? Autumn 1	**What are you teaching? Autumn 2**
Unit 1:Place value Unit 2: The four operations Revision: Exams and review	Insert response Unit 3: Perimeter, area and units Unit 4: Angles and 2D shapes Revision: Exams 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. Writing numbers in word and digit form. 2. Comparing the size of numbers. 3. Adding and subtracting tens and hundreds and the effect on place value.	1. Analyze shapes, 2. identify the defining properties of shapes 3. Angles facts
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? Autumn 1	**What are you teaching? Autumn 2**
Unit 1: Number properties Unit 2: Directed number Unit 3: Rounding and estimation Revision: Exams and review	Unit 4: Length and area Unit 5: 3D Shapes Unit 6: Compound Measures Revision: Exams 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. place value, 2. estimation and rounding; properties of number; 3. ordering and comparing;	1. identify the defining properties of shapes 2. Angles facts 3. Similar shapes and congruency
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? Autumn 1	**What are you teaching? Autumn 2**
Unit 1: Arithmetic Unit 2: Indices and roots Unit 3: Fractions, decimals and percentages Revision: Exams and review	Unit 4: Money Unit 5: Algebraic manipulation Unit 6: Coordinates and Graphs Revision: Exams 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. Powers and Roots 2. Writing very big and small numbers into standard forms 3. Standard form calculations	1. Price comparison 2. Coordinate identification 3. Real life graphs
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? Autumn 1	**What are you teaching? Autumn 2**
<u>Foundation and Crossover</u> Unit 1: Rounding and error intervals Unit 2: Percentages Unit 3: Ratio and proportion Revision, unit test and review **<u>Higher and Extension</u>** Unit 1: Surds and indices inequalities Unit 2: Drawing graphs and graphing Unit 3: Solving quadratics *Revision, unit test and review*	**<u>Foundation and Crossover</u>** Unit 4: Perimeter and Area Unit 5: Volume and surface area *Revision, unit test and review* **<u>Higher and Extension</u>** **Uni**t 4: Arcs and sectors Unit 5: Circle theorems *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. Calculate error interval **2.** Powers and roots **3.** Percentage calculations	1. Angle facts 2. Area and perimeter problem solving 3. Volume and surface area of 3D shapes (application)
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? Autumn 1	**What are you teaching? Autumn 2**

Foundation and Crossover *Unit 1: Multiples and Factors* *Unit 2: Algebraic manipulation* *Unit 3: Solving equations* *Revision, unit test and review* **Higher and Extension** Unit 1: Functions and iteration Unit 2: Transforming graphs Unit 3: Advanced Trigonometry *Revision, unit test and review*	**Foundation and Crossover** **U**nit 4: Indices and Standard form Unit 5: Area, perimeter and right-angled triangles *Revision, unit test and review* **Higher and Extension** Unit 4: Vectors Unit 5: Real life graphs and rates of change Unit 6: Algebraic proof *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. Compound units calculations 1. Bearings calculations 2. Graph identification	**1.** Understanding loci and construction **2.** Circle theorem proof **3.** Vector units

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.