

KEVICC Key Stage 3 Curriculum Subject: Mathematics		Key Vocabulary and notation.
Spring Half-Term 1 Application of Number		Fraction Equivalent Numerator Denominator Whole Original Place value Percent Percentage Percent Decimal Convert Equivalent $\frac{1}{2}$ $\frac{3}{2}$ $2\frac{1}{2}$ Mathematical questioning should be designed to unpick the structure of the maths and deepen the student's understanding. When students talk about mathematical concepts, they should develop the vital mathematical language that helps them explain their ideas fully. Students are expected and encouraged to use terminology during all discussions, verbal feedback and in written content.
Term: Year 7 Spring Term – Block Three	Topic: Fractions and Percentages of Amounts	
<p>What is the essential knowledge from this unit? What do students need to remember and understand?</p> <p>The focus for this block is focusing on the key concept of working out fractions and percentages of quantities and the links between the two. This is studied in greater depth in year 8.</p> <p>National curriculum content covered:</p> <ul style="list-style-type: none"> Use the four operators, including formal written methods, applied to integers, decimals, proper and improper fractions. Interpret fractions and percentages as operators. <p>We know that breaking the curriculum down into small manageable steps should help students to understand concepts better. As a result, for each block of content in the scheme of learning we have provided the following 'small step' breakdown for this unit as follows:</p> <p>Lesson One - Find a fraction of a given amount Lesson Two - Use a given fraction to find the whole and/or other fractions Lesson Three - Find a percentage of a given amount using mental methods Lesson Four - Find a percentage of a given amount using a calculator Lesson Five - Solve problems with fractions greater than 1 and percentages greater than 100% (H)</p> <p>Notes/Links/Interleaving</p> <ul style="list-style-type: none"> Choosing when to use mental, written or calculator methods. <p>Additional Higher Content</p> <ul style="list-style-type: none"> Use fractions greater than 1 		
<p>What prior learning supports understanding of this content?</p> <ul style="list-style-type: none"> Represent tenths and hundredths on diagrams and number lines. Interchange between fractions, decimals and percentages for multiples of one tenth and one quarter. Interpret pie charts. Equivalent fractions. Convert between other fractions, decimals and percentages. 	<p>How does this content link to future learning?</p> <ul style="list-style-type: none"> Represent tenths and hundredths on diagrams and number lines. Convert mixed numbers and improper fractions. Add and subtracting fractions with: <ul style="list-style-type: none"> The same denominator One denominator a multiple of the other Different denominators Add and subtract and decimals e.g. $\frac{3}{4} + 0.2$ 	
<p>Reading: <i>Where in the unit are students supported to read complex academic text?</i></p> <ul style="list-style-type: none"> Reading and understanding mathematical questions and problems' – teacher input. Decoding complex examination questions - explain what they are asking the student to do' – teacher input. Following instructions to solve problems - break down the tasks – teacher input. Recognising terminology, numbers, and symbols. Recognising patterns and relationships in mathematics. 	<p>Writing: <i>Independent writing tasks and how they are structured</i></p> <ul style="list-style-type: none"> Using the correct subject specific terminology for numbers and symbols – examination papers, class books. Responding to questions that ask for an explanation or a reason – examination papers, class books. Self-evaluation, reviewing, reflecting and analysis of own work –, class books, personalised learning checklists and analysis. Creating notes that can be used later for revision purposes - class books, revision cards, mind maps etc. 	
<p>Key assessments: How will students review the information learned? End of block assessments. End of block assessments provide a quick progress check at the end of each block of learning to make sure students have understood the content covered. A Core paper – it is envisaged that all students will take this paper, to provide a direct comparison with the performance of the rest of the cohort. All topics from each term will be covered, and the use of a calculator is expected. End of term assessments. A Foundation paper – students who are working below national expectations will have the opportunity to show their understanding of the material with more straightforward questions. Non calculator paper. A Higher paper – students who are working at or above national expectations will have the opportunity to tackle more challenging questions on the same material, plus the extra objectives indicated as "Higher" in our scheme of learning. Non calculator paper. How will feedback be seen?</p>		

Marked end of block and term assessments.

Personalised learning checklists for end of term assessments identifying strengths and areas of development.

Written teacher feedback and marking in compliance with faculty and College Marking Policies. Student responses to marking.

Students self-mark using purple pen. Verbal feedback given every lesson from teacher and peers as appropriate.

Teacher and student self-assessment of presentation of class books will be completed to ensure written work is of high standard and students are achieving their potential.