

KEVICC Key Stage 4 Curriculum Subject: Mathematics		Key Vocabulary and notation.															
Autumn Half-Term																	
Term: Year 9 Autumn Term – Block Nine	Topic: Rounding																
What is the essential knowledge from this unit? What do students need to remember and understand?																	
	<table border="1"> <thead> <tr> <th></th> <th>Specification content</th> <th>Specification notes</th> </tr> </thead> <tbody> <tr> <td>N15</td> <td> Round numbers and measures to an appropriate degree of accuracy (e.g. to a specified number of decimal places or significant figures) <ul style="list-style-type: none"> Use <u>inequality notation to specify simple error intervals due to truncation or rounding</u> </td> <td> including appropriate rounding for questions set in context students should know not to round values during intermediate steps of a calculation </td> </tr> <tr> <td colspan="3"> Students should be able to: <ul style="list-style-type: none"> perform money calculations, writing answers using the correct notation round numbers to the nearest whole number, 10, 100 or 1000 round numbers to a specified number of decimal places round numbers to a specified number of significant figures use inequality notation to specify error intervals due to truncation or rounding. </td> </tr> <tr> <td>N16</td> <td><u>Apply and interpret limits of accuracy</u></td> <td></td> </tr> <tr> <td colspan="3"> Students should be able to: <ul style="list-style-type: none"> interpret scales on a range of measuring instruments, including those for time, temperature, and mass, reading from the scale or marking a point on a scale to show a stated value know that measurements using real numbers depend on the choice of unit recognise that measurements given to the nearest whole unit may be inaccurate by up to one half in either direction. </td> </tr> </tbody> </table>		Specification content	Specification notes	N15	Round numbers and measures to an appropriate degree of accuracy (e.g. to a specified number of decimal places or significant figures) <ul style="list-style-type: none"> Use <u>inequality notation to specify simple error intervals due to truncation or rounding</u> 	including appropriate rounding for questions set in context students should know not to round values during intermediate steps of a calculation	Students should be able to: <ul style="list-style-type: none"> perform money calculations, writing answers using the correct notation round numbers to the nearest whole number, 10, 100 or 1000 round numbers to a specified number of decimal places round numbers to a specified number of significant figures use inequality notation to specify error intervals due to truncation or rounding. 			N16	<u>Apply and interpret limits of accuracy</u>		Students should be able to: <ul style="list-style-type: none"> interpret scales on a range of measuring instruments, including those for time, temperature, and mass, reading from the scale or marking a point on a scale to show a stated value know that measurements using real numbers depend on the choice of unit recognise that measurements given to the nearest whole unit may be inaccurate by up to one half in either direction. 			Place value Leading Digit digit Order Round Change Placeholder Deposit Significant Interest Approximate Debit Round Credit Nearest Balance Integer Metric Number line Metre Decimal point Prefix Decimal Kilo place Milli Significant Centi figure Area Estimate Units Round Square units Over/ Dimensions underestimate Equal Discrete Not equal Continuous Greater Bound than Operation Less than Decimal Negative Decimal point Compare
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What prior learning supports understanding of this content? <ul style="list-style-type: none"> Read, write, and order and compare numbers up to 10 000 000 and determine the value of each digit. Use mental and formal written methods of multiplication and division. Multiply by 10, 100 and 1000, 0.1 and 0.01, and convert metric units. Round any whole number to a required degree of accuracy Use negative numbers in context and calculate intervals across zero. Use their knowledge of the order of operations to carry out calculations involving the four operations. Solve number and practical problems that involve all the above. 		How does this content link to future learning? <ul style="list-style-type: none"> Define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or decimal and interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages and work with percentages greater than 100%. Interpret fractions and percentages as operators. Solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics. 															
Reading: <i>Where in the unit are students supported to read complex academic text?</i> <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. 		Writing: <i>Independent writing tasks and how they are structured</i> <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. 															
		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.															

- Recognising terminology, numbers, and symbols.

- Creating notes that can be used later for revision purposes - class books, revision cards, mind maps etc.

Key assessments:

How will do students review the information learned?

End of block assessments.

AQA 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 being covered. These are available for both foundation and higher tiers.

End of term/year assessments and mock examinations.

End of term assessments assessing the students' progress towards targets and provide diagnostic information to modify future teaching. End of year 9 and 10 examinations assessing the students' progress towards targets and provide diagnostic information to modify future teaching.

Two mock examinations seasons take place during year 11 using previous years AQA 8300 examination papers. Students to experience the full suite of papers at both Foundation and higher tiers using Non-calculator and Calculator requirements.

All examinations will explore the three examination papers at both foundation and higher tiers using non-calculator and calculator requirements.

How will feedback be seen?

Marked end of block, term assessments and mock examinations.

Personalised learning checklists for all 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.