

KEVICC Key Stage 4 Curriculum Subject: Mathematics		Key Vocabulary and notation.																					
<b>Autumn Half-Term</b>																							
<b>Term:</b> Year 10 Autumn Term – Block Four	<b>Topic:</b> Statistical Measures																						
<b>What is the essential knowledge from this unit?</b> <b>What do students need to remember and understand?</b>																							
	<table border="1"> <thead> <tr> <th></th> <th>Specification content</th> <th>Specification notes</th> </tr> </thead> <tbody> <tr> <td>S4</td> <td>Interpret, analyse, and compare the distributions of data sets from univariate empirical distributions through: appropriate measures of central tendency (median, mean, mode and modal class) spread (range, including consideration of outliers)</td> <td></td> </tr> <tr> <td colspan="3">           Students should be able to:           <ul style="list-style-type: none"> <li>decide whether data is qualitative, discrete, or continuous and use this decision to make sound judgements in choosing suitable diagrams for the data</li> <li>understand the difference between grouped and ungrouped data</li> <li>understand the advantages and disadvantages of grouping data</li> <li>distinguish between primary and secondary data</li> <li>use lists, tables or diagrams to find values for the above measures</li> <li>find the mean for a discrete frequency 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		Quartile Upper Quartile Inter-quartile range Class interval Mean Median Range Modal Class Analyse Estimate Frequencies Axis Axes Horizontal Vertical Curve Outliers Minimum value Maximum value Whisker Compare data 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.																					
<b>What prior learning supports understanding of this content?</b> <ul style="list-style-type: none"> <li>Revisit the median and mean, including finding the total given the mean.</li> <li>Find the mean of grouped data.</li> <li>Work out the mode and modal class.</li> <li>Choose the appropriate average.</li> <li>Find unknown data values given the mean or changes in the mean.</li> <li>Find the median from a table of values.</li> </ul>		<b>How does this content link to future learning?</b> <ul style="list-style-type: none"> <li>Consolidate subject content for statistical measures from key stage 4.</li> <li>Revise and explore subject content through examination questions and in context.</li> </ul>																					
<b>Reading:</b> <i>Where in the unit are students supported to read complex academic text?</i> <ul style="list-style-type: none"> <li>Reading and understanding mathematical questions and problems' – teacher input.</li> <li>Decoding complex examination questions - explain what they are asking the student to do' – teacher input.</li> <li>Following instructions to solve problems - break down the tasks – teacher input.</li> <li>Recognising terminology, numbers, and symbols.</li> </ul>		<b>Writing:</b> <i>Independent writing tasks and how they are structured</i> <ul style="list-style-type: none"> <li>Using the correct subject specific terminology for numbers and symbols – examination papers, class books.</li> <li>Responding to questions that ask for an explanation or a reason – examination papers, class books.</li> <li>Self-evaluation, reviewing, reflecting and analysis of own work – class books, personalised learning checklists and analysis.</li> <li>Creating notes that can be used later for revision purposes - class books, revision cards, mind maps etc.</li> </ul>																					
<b>Key assessments:</b> 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.