

KEVICC Key Stage 4 Curriculum Subject: Mathematics		Key Vocabulary and notation.																						
Spring Half-Term																								
Term: Year 10 Spring Term – Block Two		Topic: Congruence and Similarity																						
<p><b>What is the essential knowledge from this unit?</b>  <b>What do students need to remember and understand?</b></p>		<p>SSS Congruent  Side – side- Similar  side Scale factor  ASA In proportion  Angle-side- Ratio  angle Corresponding  SAS Length scale  Side-Angle- factor  Side Parallel  RHS Alternate  Right angle- angles  hypotenuse- Corresponding  side angles  Conditions Enlarge  of Length scale  congruence factor  Object Area scale  Image factor  Proportion Volume scale  Enlarge factor</p> <p>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.</p> <p>Students are expected and encouraged to use terminology during all discussions, verbal feedback and in written content.</p>																						
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<p><b>What prior learning supports understanding of this content?</b></p> <ul style="list-style-type: none"> <li>Understand ratio and its link to multiplication.</li> <li>Use ratio notation.</li> <li>Reduce ratios to simplest form.</li> <li>Solve ratio problems.</li> <li>Recap understanding of congruency.</li> <li>Review area and volume of shapes covered in key stage 3.</li> <li>Use of significant figures.</li> </ul>		<p><b>How does this content link to future learning?</b></p> <ul style="list-style-type: none"> <li>Know the formulae for: Pythagoras' theorem, <math>a^2 + b^2 = c^2</math>, and the trigonometric ratios,</li> </ul> $\sin\theta = \frac{\textit{opposite}}{\textit{hypotenuse}} \quad \cos\theta = \frac{\textit{adjacent}}{\textit{hypotenuse}} \quad \tan\theta = \frac{\textit{opposite}}{\textit{adjacent}}$ <p>apply them to find angles and lengths in right-angled triangles in two dimensional figures.</p>																						
<p><b>Reading:</b> <i>Where in the unit are students supported to read complex academic text?</i></p> <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>		<p><b>Writing:</b> <i>Independent writing tasks and how they are structured</i></p> <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>																						

**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.