

KEVICC Key Stage 4 Curriculum Subject: Mathematics		Key Vocabulary and notation.																																																															
Spring Half-Term																																																																	
Term: Year 11 Spring Term – Block Two	Topic: Trigonometry																																																																
What is the essential knowledge from this unit? What do students need to remember and understand?																																																																	
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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>	Pythagoras'	Angle	Theorem	Lengths	Formula	Relationship	Right Angle	Trigonometric	Adjacent	ratio	Opposite	Square	Hypotenuse	Square root	Right Angle	Sum	Triangle	Total	Non right-angle triangle	Substitute	Formula	Calculate	Rearrange	Proof	Subject	Prove	Subject of formula	Surds	Sine	Exact value	Cosine	Simplifying	Inverse	$\sin \theta \quad \sin^{-1} x$	Plane	$\cos \theta \quad \cos^{-1} x$	Midpoint	$\tan \theta \quad \tan^{-1} x$	Perpendicular	Slope		Diagonal
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What prior learning supports understanding of this content? <ul style="list-style-type: none"> Identify the hypotenuse of a right-angled triangle. Determine whether a triangle is right-angled. Calculate missing sides in right-angled triangles. Recall the formulae for: Pythagoras' theorem, $a^2 + b^2 = c^2$, $\sin \theta = \frac{\textit{opposite}}{\textit{hypotenuse}} \quad \cos \theta = \frac{\textit{adjacent}}{\textit{hypotenuse}} \quad \tan \theta = \frac{\textit{opposite}}{\textit{adjacent}}$ <p>apply them to find angles and lengths in right-angled triangles in two dimensional figures (review of Year 10).</p>		How does this content link to future learning? <ul style="list-style-type: none"> Understand and use vector notation. Calculate and represent graphically the sum of two vectors, the difference of two vectors and a scalar multiple of a vector. Calculate the resultant of two vectors. Understand and use the commutative and associative properties of vector addition. 																																																															
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. Recognising terminology, numbers, and symbols. 		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. 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.