KEVICC Key Stage 4 Curriculum Subject: Mathematics						Key Vocabulary and notation.							
Spring Half-Term						Develieve	Deflet						
Term: Year 9 Spring Term – Block Five Topic: Circumference and Area							Reliex						
What is the essential knowledge from this unit?						Diameter	Edges						
What do students need to remember and understand?						Face							
		Specification content			Specification notes	langent	Verfices						
						Arc	Vertex						
	G9 Identify and apply circle defini		ions and properties, including centre		e, radius, chord,	Sector	Decimal						
	diameter, circumference, <u>tangent, arc, sector and segment</u>					Segment	place						
	Students should be able to:					Semi-circle	Estimate						
recall the definition of a circle					Circle	Calculate							
	 Identify and name the parts of a circle draw the parts of a circle 					π	Substitute						
	understand related terms of a circle					Approximately	Significant						
	draw a circle given the radius or diameter.				Estimate	figures							
	G17 Know and use the formulae			solutions in terms	solutions in terms	In terms of π	Cube						
	017	Circumference =2 $\pi r = \pi d$ Area = πr^2		of π may be asked	of π may be asked for	Formula	Cuboid						
						Area	Prism						
		Calculate the perimeter of 2D shapes including circles and composite shapes Calculate areas of circles and composite shapes <u>Calculate surface area of spheres, cones and composite solids</u>				Perpendicular	Cylinder						
						height	Pyramid						
						Perpendicular	Cone						
	Studon						Sphere						
 recall and use the formula for the circumference of a circle 						Length	Hemi-spheres						
	work out the circumference of a circle, given the radius or diameter					Acute	Uniform						
• work out the radius or diameter given the circumterence of a circle • use $\pi = 3.14$ or the π button on a calculator					Obtuse	Cross-section							
work out the perimeter of semicircles, quarter circles or other fractions of a circle						Right-gngle	Compound						
 recall and use the formula for the area of a circle work out the area of a circle, given the radius or diameter 					i i gi i i i i gi i	Compoond							
	 work out the radius or diameter given the area of a circle 					Mathematical questioning should							
	• wo	ork out the area of semicircles, quarter circles or other fractions of a circle				structure of the maths and							
	G18	Calculate arc lenaths, anales and	nd areas of sectors of circles		deepen the student's								
Students should be able to: • calculate the length of arcs of circles • calculate the area of sectors of circles • given the lengths or areas of arcs, calculate the angle subtended at the centre.					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	
							willen comeni.						
What prior learning supports understanding of this content? Becall and use the formulae for the perimeter and area of a Consolidate and build on subject content of Transformations													
	rectangle, triangle, parallelogram, and trapezium. from key stage 3.												
•	Calc	Calculate the perimeter and area of shapes made from triangles and rectangles					ruct congruent and similar shapes,						
•	 Calculate the perimeter and area of compound shapes made from two or more rectangles, for example an L shape or T shape. Identify and apply circle definitions and properties. Identify and apply circle definitions and properties. Including on co-orainate as reflection, translation and e negative scale factors). Describe translations as 2D • Describe the changes and combinations of rotations, reflection, translation and e 					vectors. invariance achieved by eflections and translations (including							
•													
using column vector notation for translations).													
Reading: Where in the unit are students supported to read Writ complex academic text?					 Using the correct subject specific terminoloay for numbers and 								
•	Rea	ading and understanding mathematical questions and symbols – examination paper				ers, class books.							
	prok	blems' – teacher input. coding complex examination questions - explain what - examination papers			sponding to questions that	at ask for an explanation or a reason as books.							
	they	are asking the student to do' – te	acher input.	elf-evaluation, reviewing, reflecting and analysis of own work –									
Following instructions to solve problems - break down the tasks - tagehor input				class books, personalised learning checklists and analysis.									
 tasks – teacher input. 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?

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