Longfield Learning Journey

Key Stage 4 HIGHER	Unit of work: Unit of Proportionality			

Key Words:	Prerequisites	R	A	G
Speed, distance, time, density , mass, volume, gradient, direct proportion, indirect proportion, ratio	Convert units cm to m etc..			
	Rearrange formula			
	Multiply and divide by fractions and decimals			

	Content:	R	A	G
	Content: Unit of Proportionality			
R1	Change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. rates of pay, prices, density) in numerical contexts.			
R11	Use compound units such as speed, rates of pay, unit pricing, density and pressure.			
R12	Compare lengths, areas and volumes using ratio notation; make links to similarity and scale factors.			
R10	Solve problems involving direct and inverse proportion, including graphical and algebraic representations.			
R13	Understand that X is inversely proportional to Y is equivalent to X is proportional to 1/Y. direct and inverse proportion.			
R13	Construct and interpret equations that describe direct and inverse proportion.			
R14	Interpret the gradient of a straight line graph as a rate of change.			
R14	Recognise and interpret graphs that illustrate direct and inverse proportion.			
R15	Interpret the gradient at a point on a curve as the instantaneous rate of change			
R15	Apply the concepts of average and instantaneous rate of change (gradients of chords and tangents) in numerical, algebraic and graphical contexts.			
R16	Set up, solve and interpret the answers in growth and decay problems, including compound interest and work with general iterative processes.			

K	W	L
What you know	*What you want to know*	*What have you learned*