



# Longfield Learning Journey



<b>Key Stage 4 HIGHER</b>	<b>Unit of work: Graphs 1</b>			
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Key Words:	Prerequisites Green core – Blue extend	R	A	G
Coordinate, equation, linear, quadratic, rate of change, gradient, completing the square, roots.	Substitute numerical values into expressions.			
	Plot coordinates in all for quadrants.			
	Solve linear equations.			
	Give the gradient and y-intercept of a straight line.			

	Content: Graphs 1 -	R	A	G
A8	Work with coordinates in all four quadrants.			
A9	Plot straight line graphs.			
A9	Use the form $y=mx + c$ to identify parallel and perpendicular lines.			
A9	Find the equation of the line through two given points or through one point with a given gradient.			
A10	Identify and interpret gradients and intercepts of linear functions graphically and algebraically.			
R14	Interpret the gradient of a straight line graph as a rate of change.			
A12	Recognise, sketch and interpret graphs of linear functions and quadratic functions.			
A12	Identify and interpret roots, intercepts, turning points of quadratics graphically.			
A12	Deduce roots algebraically and turning points by completing the square.			
A14	Plot and interpret graphs to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration.			

<b>K</b> <i>What you know</i>	<b>W</b> <i>What you want to know</i>	<b>L</b> <i>What have you learned</i>