



# Longfield Learning Journey



<b>Key Stage 4 HIGHER</b>	<b>Unit of work: Working in 2 dimensions</b>	
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<b>Key Words:</b>	<b>Prerequisites Green core – Blue extend</b>	<b>R</b>	<b>A</b>	<b>G</b>
Scale drawings, bearings, reflection, rotation, reflection, enlargement, scale factor, integer, vector, invariance, triangles, parallelograms, trapezia and composite shapes	Calculate the area of rectangles, squares and triangles in $mm^2$ and $cm^2$			
	Write the coordinates of points on a grid.			
	Calculate the perimeter of rectangles, squares and triangles in mm and cm.			
	Write the equation of the line $y=x$ , and of lines parallel to the x and y axis.			

	<b>Content: Working in 2 dimensions - Unit 7</b>	<b>R</b>	<b>A</b>	<b>G</b>
G15	Measure line segments including interpreting maps and scale drawings.			
G15	Measure bearings including interpreting maps and scale drawings.			
G16	Know and apply formulae to calculate the area of triangles, parallelograms, trapezia and composite shapes.			
G7	Construct the image of a shape once rotated.			
G7	Construct the image of a shape once reflected.			
G7	Construct the image of a shape once translated.			
G7	Construct the image of a shape once enlarged using a positive integer or fractional scale factor.			
G7	Construct the image of a shape once enlarged using a negative integer or fractional scale factor.			
G8	Describe translations as 2D vectors.			
G11	Describe the changes and invariance achieved by combinations of rotations, reflections and translations.			
G11	Solve geometrical problems on coordinate axes.			

<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>