



Longfield Learning Journey



Key Stage 4 HIGHER	Unit of work: Working in 3 Dimensions	
-------------------------------	--	--

Key Words:	Prerequisites Green core – Blue extend	R	A	G
Faces, surfaces, edges, vertices, cubes, cuboids, prisms and pyramids, sphere, similar, congruent.	Calculate the surface area and volume of a cube.			
	Calculate the area and circumference of a circle.			

	Content: Working in 3 Dimensions	R	A	G
G12	Identify properties of the faces, surfaces, edges and vertices of: cubes, cuboids, prisms and pyramids.			
G13	Construct and interpret plans and elevations of 3D shapes.			
G16	Know and apply formulae to calculate the volume of cuboids and other right prisms (including cylinders)			
G14	Use standard units of measure for volume, capacity and mass.			
G17	Know and apply formulae for the surface area and volume of spheres.			
G17	Know and apply formulae for the surface area and volume of pyramids.			
G17	Know and apply formulae for the surface area and volume of cones.			
G17	Know and apply formulae for the surface area and volume of composite shapes.			
G19	Apply concepts of congruence and similarity, including the relationships between lengths, areas and volumes in similar figures.			

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