Subject	Year	Month	1
Mathematics	11	November	Balcarras
Topic:			
Plans, elevations and nets 3 lessons			
Content (Intent)			
Prior Learning	Future Learning		
Year 10 3D forms and volume			
Objectives			
Understand clockwise and anticlockwise;			
 Draw circles and arcs to a given radius or given the diameter; 			
 Measure and draw lines, to the nearest mm; 			
 Measure and draw angles, to the nearest degree; 			
 Know and use compass directions; 			
 Draw sketches of 3D solids; 			
 Know the terms face, edge and vertex; 			
 Identify and sketch planes of symmetry of 3D solids; 			
 Use isometric grids to draw 2D representations of 3D solids; 			
• Make accurate drawings of triangles and other 2D shapes using a ruler and a protractor;			
• Construct diagrams of everyday 2D situations involving rectangles, triangles, perpendicular and			
parallel lines;			
• Understand and draw front and side elevations and plans of shapes made from simple solids;			
• Given the front and side elevations and the plan of a solid, draw a sketch of the 3D solid.			
Pedagogical notes (implementation)	How will understanding be assessed &		
	recorded (Impact)		
This is a very practical topic, and provides	End of half term no End of Year 2 nd mocks in Feb & March		
Whilst not an explicit objective it is useful for	How can parents help at home? MathsWatch clips Qualification KS3: G10ab, G12abc		
students to draw and construct nets and show how			
they fold to make 3D solids, allowing students to make			
the link between 3D shapes and their nets. This will			
enable students to understand that there is often			
more than one net that can form a 3D shape.			
	Qualification KS4: 43, 44, 46ab, 51		
Further reading/discussion			
Reading / Enrichment	Literacy	Numeracy	Careers Links
		Links	Architect
			Graphic designer

Landscape gardener