

Year 7- Design and Technology

Topic	Rationale	Knowledge acquisition	Task - Notes	Key vocabulary	Skills and enrichment
Design Development CAD Level 1	<p>This topic gives students the opportunity to gain skills and knowledge of CAD software used to create 3D virtual outcomes.</p> <p>Links to..... KS2. Possible use of CAD software to create designs (Personal use of games such as Minecraft) KS3. Use of CAD to develop outcomes for CAM.</p> <p>Ladders towards.... An understanding of CAD used in the wider world and how designs can be quickly developed using CAD and iterations shown. Skill building in preparation for GCSE</p>	<p>To know that CAD is used to generate and develop design ideas, showing iteration. To know how to set up a drawing template correctly on Google-sketch up</p>	<p>What is CAD, where is it use? Why? Set up of google sketch up template in MM. Tool bars Scale 2D shapes Push pull Navigate</p>	<p>CAD Scale 2D 2D Navigate</p>	<p>Subject specific Skills.</p> <ul style="list-style-type: none"> Idea creation & development Graphical communication ICT Skills <p>Numeracy</p> <ul style="list-style-type: none"> Measuring in MM Scale <p>Literacy</p> <ul style="list-style-type: none"> Key vocab, meanings, and context Comprehension of instructions for processes <p>Cultural Capital</p> <ul style="list-style-type: none"> Big brands such as Apple and Dyson use of CAD <p>Links to National Curriculum</p> <p>Design:</p> <ul style="list-style-type: none"> Use a variety of approaches to generate creative ideas. develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools <p>Evaluate:</p> <ul style="list-style-type: none"> Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers, and technologists.
		<p>To know how to use the drawing features tools on Google sketch up to create features on a CAD design drawing.</p>	<p>Add a radius to edge Add a chamfer to the edge Different views Resize function Copy and paste function</p>	<p>Radius Chamfer</p>	
		<p>To know how to render a CAD drawing on Google Sketch up</p>	<p>Paint effects</p>	<p>Render Iteration</p>	
		<p>To know how to use all of the tools taught over the level 1 induction to produce a project drawing(money box)</p>	<p>Use all tools taught so far to create a final CAD drawing of a project (can do iterations)</p>	<p>Navigate Radius Chamfer Render Iteration</p>	