

Design and Technology Learning Program Year 2 Desk Tidy & CAD Project

Topic/Content	Objective/Skills	Homework	Assessment	Success Criteria	Stretch and Challenge
Week 1 Measuring and marking out	Learn how to measure and mark out using a try square, ruler, marking gauge and template	Complete a detailed diary / description of the processes taught in the lesson using both sketches and annotations as per GCSE exam style questions.	<p>Excellent 8-10 marks Secure 5-7 marks Developing 1-5 marks</p> <p>Example products will be used to show the difference between E,S and D.</p>	<p>Excellent: High levels of precision demonstrated throughout to produce a professional looking product with a high end finish</p> <p>Secure: Demonstrating some accuracy and with a reasonable quality finish</p> <p>Developing: Working without accuracy and the finish achieved looks incomplete</p>	<p>Research quality control (QC), quality assurance (QA)and tolerance.</p> <p>Research hand tools used to check QA and QC.</p> <p>Try and produce a diary of how to product might be mass produced if made in industry.</p>
Week 2 Removing waste	Learn how to remove waste using a tenon saw and pillar drill	Diary completion			
Week 3 Shaping and smoothing	Learn how to shape and smooth using rasp, file and glass paper	Diary completion			
Week 4	Learn how to apply a finish	Diary completion			
Week 5 Strip Heater	<ul style="list-style-type: none"> Learn how to use the strip heater Learn how to join materials using clearance holes and pilot holes 	Diary completion			
Week 6 Solid Works	Learn how to draw and extrude using Solid Works	<p><i>Students need to download Google Sketchup and work through tutorials to learn the basics. Students should aim to recreate the product using Google Sketchup. Those without IT facilities will be able to use the DT PCs.</i></p> <p>Work needs to be printed and stuck into books as evidence.</p>	Formative assessment during each lesson to assess if students have been able to follow the tutorials.		More advance Google sketch up products using the online tutorials. All work needs to be printed and stuck into books as evidence.
Week 7 Solid Works	Learn how to use guides and remove material using Solid Works				
Week 8 Solid Works	Learn how to chamfer and round edges using Solid Works				
Week 9 Solid Works	Learn how to assemble components using Solid Works				
Week 10 Solid Works	Learn how to render components using Solid Works and create an Orthographic Drawing from the product				