



Subject	Year	Specialism
Design and Technology	Year 10	Product Design

Project

Desk Tidy Mini Project

Content (Intent)

Prior Learning: KS3 Product Design – Block Bot, Pinball and Bee Hotel. Corel Draw skills from KS3 projects – Trick Deck, Pinball and Block Bot.

This project has been designed to give students more experience in the workshop to support the designing and making components of the NEA project (worth 50% of their GCSE grade). In this project students will develop and learn a range of making skills such as cutting and shaping timbers, working with metals, use of adhesives and CAD/CAM processes for polymers (laser cutting of acrylic and 3D printing). As well as skills the students will also gain experience of working on their own individual project, taking control of the design process and planning their making time. Independence is essential and is something the students will develop during this project.

Future Learning – This project develops essential making skills for the GCSE NEA project. The independence skills developed in this project will support progress with the NEA.

How will knowledge and skills be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
--	---

<ul style="list-style-type: none"> • Cutting and shaping of timbers through the creation of the main desk tidy shape • Use of metal work tools to produce aluminium/steel components • Use of CorelDraw to produce laser cut parts • SpaceClaim use to create 3D printed PLA parts • Fabrication skills taught through use of adhesives and during final assembly of product • Range of finishing techniques used to complete product • Independence and project planning skills taught through use of making diaries 	<p>Assessment Students complete all research and design work in exercise books. These are regularly assessed and feedback given on key pieces to ensure progress. A final effort and grade is given at the end of the project focusing on the final outcome (creativity and quality of finish).</p> <p>Main areas of assessment:</p> <ul style="list-style-type: none"> • Desk tidy initial ideas • Manufacturing specification • Making diary • Final product
--	--

How can parents help at home?

Parents and carers can ask to view their child's work and offer feedback on their design ideas. Students will need client feedback throughout the project so it is great to get parents involved. Parents/Carers can also ensure that their child has drawing equipment such as coloured pencils to enhance their design pages.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

<p>Reading</p> <p>CGP GCSE D&T Revision Guide Balcarras Product Design Pages https://www.technologystudent.com/ https://www.bbc.co.uk/bitesize/examspecs/zby2bdm</p>	<p>Vocabulary</p> <p>Isometric Manufacturing Specification Plywood Aluminium Epoxy Resin Hacksaw PLA 3D Printing</p>	<p>Careers Links</p> <p>Product Design Graphic Design Design Engineering CAD CAM Carpentry Construction</p>
---	---	--