D&T *at Balcarras*

Subject	Year	Specialism
Design and Technology	Year 10	Product Design

Project
Personalised Key Holder Project

Content (Intent)

Prior Learning: KS3 Product Design – Trick Deck, Zip Tag, Block Bot, Pinball and the Chocolate project all establish design skills which are built upon in this project.

This project focuses on the use of CAD to create a laser cut plywood product. The students must consider theme and how each key will slot into the backboard to produce a functional product. Creativity is encouraged to design something unique. CorelDraw skills are then developed to produce the products. This teaches the students valuable knowledge of how to set up a CorelDraw image to cut and engrave – both essential skills for future NEA work.

Future Learning – GCSE NEA project (50% of GCSE grade)

How will knowledge and skills be taught (Implementation)		How will your understanding be assessed & recorded (Impact)
• **Design idea generation** taught through use of mood boards, product analysis and mind mapping • **CorelDraw skills** (use of pen tool, B-Spline, 2 point line, shape tools etc) taught through teacher demonstrations • **Use of CADCAM systems** (laser cutter) – use of correct line width, RGB colour and settings for etching taught through teacher demos.		**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 CAD skill). **Main areas of assessment:** • Initial ideas • CorelDraw Design • 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)

Reading	Vocabulary	Careers Links
CGP GCSE D&T Revision Guide **Balcarras Product Design Pages** **https://www.technologystudent.com/** **https://www.bbc.co.uk/bitesize/examspecs/zby2bdm**	CorelDraw Vector Etch Engrave RGB CMYK Laser cutter Laser ply PVA	Product Design Graphic Design Design Engineering Art and Design careers