



Subject	Year	Specialism
Design and Technology	Year 7	Product Design

## Project

Zip Tag Project

## Content (Intent)

**Prior Learning:** Y7 D&T and KS2 D&T Curriculum

Year 7 D&T is focused around skill building to ensure students feel confident using a range of tools and materials to design and make products.

During this project the students will use CAD (CorelDraw) to create their zip tag design. They will start to use a range of CorelDraw tools that will enable them to create complex shapes ready to be processed by CNC machinery. Students will also learn how to finish metal.

**Future Learning:** Y8 Pinball and Chocolate Project

How will knowledge and skills be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
<ul style="list-style-type: none"> <li>• How to use a <b>mood board</b> to inspire ideas</li> <li>• How to <b>combine shapes together</b> to produce a range of design ideas</li> <li>• How to <b>simplify designs</b> for the casting process</li> <li>• Use CorelDraw to:               <ul style="list-style-type: none"> <li>◦ Draw shapes using the <b>pen tool, B spline tool, line tool and curve tool</b></li> <li>◦ Use the <b>shape tools</b> – ellipse, rectangle</li> <li>◦ Delete lines using the <b>virtual segment delete</b></li> </ul> </li> <li>• How the casting moulds are made using the <b>CNC Router</b></li> <li>• How to <b>cast molten pewter</b> into a mould</li> <li>• The <b>Health and Safety</b> protection required</li> <li>• How to <b>file and shape metal</b></li> <li>• How to achieve a <b>high quality finish</b> using wet and dry paper</li> <li>• How to <b>evaluate</b> your finished product</li> </ul>	<p><b>Assessment</b></p> <p>Each project is individually assessed through teacher assessment and the final end of year progress and effort grades are based on all work completed in Y7 D&amp;T.</p> <p>Key project work will be used to build up a clear picture of student effort and progress. All homework will be given a progress and effort grade.</p> <p><b>Main areas of assessment:</b></p> <ul style="list-style-type: none"> <li>• Generating original ideas</li> <li>• Use of CAD to generate final design</li> <li>• Quality of finish on final product</li> <li>• Final evaluation</li> </ul>

## How can parents help at home?

Students will complete their design work and homework in a project booklet. It would be great if you could talk this through with your child to help them develop their ideas further and ensure tasks are complete.

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

<p><b>Reading</b></p> <p>VLE D&amp;T site page  <a href="http://www.technologystudent.com">www.technologystudent.com</a>  <a href="https://designmuseum.org/">https://designmuseum.org/</a></p>	<p><b>Vocabulary</b></p> <p>Pewter, Necuron, CNC, CAD, wet and dry, needle file</p>	<p><b>Careers Links</b></p> <p>Jewellery design, CAD careers, engineering and metal work</p>
---	---	--