

Product Design

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Curriculum Intent: Students will learn through a variety of projects during KS3/4 and 5, how to use the technological principles of explore, create, and evaluate to solve problems. On this learning journey, these projects will also bestow upon them the technical knowledge required to be a Product Designer.

Core Knowledge	Procedural Knowledge
<p>Topics:</p> <p>4 Ps of sketching.</p> <p>Nets.</p> <p>Thick and thin lines concept.</p> <p>Types of wood.</p> <p>Timber properties.</p> <p>Thermo-polymers categories.</p> <p>Templates and jigs.</p> <p>Temporary and permanent fixtures.</p> <p>Specifications.</p> <p>Introduction to Iterative design.</p> <p>Area/Volume (maths).</p>	<p>Students will:</p> <p>Develop basic sketching skills and practise isometric drawing.</p> <p>Render.</p> <p>Learn about One point perspective and Two-point perspective.</p> <p>Learn about crating.</p> <p>Use thick and thin lines.</p> <p>Use Hand tools and power tools such as the band facer, pillar drill.</p> <p>Use templates and jigs.</p> <p>Learn independently.</p> <p>Evaluate.</p> <p>Use the correct Mathematical formula to solve problems.</p> <p>Design to a specification.</p>
<p>Homework: Homework is set on Satchel:One for every six hours taught Homework will comprise a presentation on The Positive Impact of Technology and revision for tests</p>	
<p>Assessment: Formative verbal and other feedback Exploration grade (research), Create grade (making), Evaluation grade, Principles grade through a multiple-choice test and presentation skills and content grade.</p>	
<p>Links to Personal Development:</p> <p>Dexterity and hand skills.</p> <p>Self-evaluation of work.</p> <p>Presentation skills.</p> <p>Research/analytical skills.</p>	
<p>How is my knowledge further developed in Year 8?</p> <p>In Y8, students will learn the following through a sustainability project – Sustainable design, 6 Rs of sustainability, analysis of products and their environmental impact, materials properties, advancement of previous workshop skills and basic metal skills.</p>	