

# 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><b>Topics:</b></p> <p>6Rs.</p> <p>Sustainability.</p> <p>Anthropocene definition.</p> <p>Production plans.</p> <p>Materials – environmentally friendly.</p> <p>H&amp;S and risk assessment.</p> <p>Sustainable design.</p> <p>SWOT analysis.</p>	<p><b>Students will:</b></p> <p>Learn how to analyse a context.</p> <p>Write a Specification.</p> <p>Use templates and jigs.</p> <p>Use Hand tools.</p> <p>Solder.</p> <p>Sketch models.</p> <p>Develop design skills – 2D.</p> <p>Render.</p> <p>Work with Metal.</p>

**Homework:** Homework is set on Satchel: One for every six hours taught.  
Homework will comprise a presentation on The Negative Impact of Technology and revision for tests.

**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.

**Links to Personal Development:**

Following drawings.  
Manufacturing understanding.  
Dexterity and hand skills.  
Machining skills.  
Self-evaluation of work.  
Presentation skills.  
Research/analytical skills.  
CAD/CAM skills.  
Design skills.

**How is my knowledge further developed in Year 9?**

In Year 9, students will learn the following through a series of different projects – CAD, CAM, Carpentry skills, Casting, Architectural design/modelling, 3D printing, sketch modelling, Furniture Design and Iterative Design.