



	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
	Bug Torch Project					
Year 7	<p>Topic: Design and make a Bug Torch</p> <p>Resources: tools, materials, components</p> <p>Focus: To develop the knowledge and skills required to research, plan, design, make and evaluate a product.</p> <p>Outcome: Knowledge of health & safety, different tools and materials, understanding of role of function and aesthetic qualities. Assessment based on GCSE criteria.</p> <p>Duration: 14 lessons</p>					
Year 8	Pencil Case Project					
	<p>Topic: Design and make a Pencil Case</p> <p>Resources: tools, materials, components, research facilities, CAD/CAM software</p> <p>Focus: To understand the role of sustainability and target demographic in the design and making of a product. To use CAD/CAM and extend knowledge of use of tools and materials.</p> <p>Outcome: Knowledge of design communication techniques, principles of measuring, marking and accurate cutting. Different material properties e.g. wood and themoplastics. Application of quality control and assurance in practical work. Assessment based on GCSE criteria.</p> <p>Duration: 14 lessons</p>					
Year 9	CAD/CAM – Desk Top Storage		Pewter Casting		Clock Project	
	<p>Topic: Use CAD/CAM to design and make</p> <p>Resources: tools, materials, components, research facilities CAD/CAM software</p> <p>Focus: Design & make process and quality assurance. Creation of digital manufacturing sheets.</p> <p>Outcome: Knowledge and understanding of role of digital technology in design and manufacture and design communication. Assessment using GCSE criteria</p> <p>Duration: 24 lessons</p>		<p>Topic: Casting metal</p> <p>Resources: tools, metals and other materials, components, research facilities, blow torch</p> <p>Focus: Processing and handling of metals effectively and safely</p> <p>Outcome: Accurate use of templates, knowledge of safe use of specific equipment, knowledge of finishing techniques. Assessment using GCSE criteria</p> <p>Duration: 12 lessons</p>		<p>Topic: Combining a range of materials to create a clock that meets given specifications.</p> <p>Resources: tools, materials, components, research facilities, CAD/CAM software</p> <p>Focus: Selection of materials to combine effectively and tools to shape and form the chosen materials. Complexity of design.</p> <p>Outcome: Complex and accurate shapes with attention to detail within a creative design concept.</p> <p>Duration: 36 lessons</p>	



<p>Year 10</p>	<p>Topic: Make & Model – Salad Tongs</p> <p>Resources: tools, materials, components</p> <p>Focus: Modelling for Development</p> <p>Outcome: Ideas developed via the modelling process and principles of anthropometrics and ergonomics applied. GCSE criteria based assessment.</p> <p>Duration: 12 lessons</p>	<p>Topic: Bagged Materials</p> <p>Resources: tools, materials, components</p> <p>Focus: Meaning and properties of materials.</p> <p>Outcome: Knowledge of the typical properties of different types of material</p> <p>Duration: 6 lessons</p>	<p>Topic: Sketch Up</p> <p>Resources: Digital modelling software</p> <p>Focus: Use of digital modelling to create 3D models</p> <p>Outcome: Knowledge of process of digital modelling to apply to the design and development of projects</p> <p>Duration: 10 lessons</p>	<p>Topic: Enamelling Project</p> <p>Resources: tools, materials, components, copper</p> <p>Focus: Processing copper and applying enamel finish</p> <p>Outcome: Templates used to form layered designs, knowledge of enamelling including decorative and functional applications</p> <p>Duration: 12 lessons</p>	<p>Topic: Product Disassembly</p> <p>Resources: tools, materials, components</p> <p>Focus: Understanding how specific products are made</p> <p>Outcome: Knowledge of manufacturing processes and material choices</p> <p>Duration: 6 lessons</p>	<p>Topic: Foot Stool Project</p> <p>Resources: tools, materials, components</p> <p>Focus: Orthographic, technical drawing, specific tools.</p> <p>Outcome: Accurate scale drawings, orthographic and first and third angle projection knowledge, shape and forming materials</p> <p>Duration: 12 lessons</p>
<p>Non Examination Assessment</p>						
<p>Year 11</p>	<p>Topic: NEA</p> <p>Resources: tools, materials, components, design software</p> <p>Focus: Design, Make and Evaluate</p> <p>Outcome: 20-25 page folio</p> <p>Duration:</p>					