



KS3 Curriculum Map

Design and Technology Department

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 7				<p>Pewter cast keyring and Aluminium lid</p> <p>Understand how to manufacture a quality product</p> <p>Quality Control to improve design</p> <p>Creating nets</p> <p>Casting techniques</p> <p>Metals – ferrous and non-ferrous</p> <p>Creating a mould</p> <p>Accurate use of hand tools</p> <p>Accurate use of measuring and marking tools</p> <p>Metal bending techniques</p> <p>Metal punching techniques</p>	<p>Clock with CAD generated decoration</p> <p>Research skills-design movements</p> <p>How to draw and present ideas</p> <p>Modelling skills</p> <p>Creating templates for numbers and shape</p> <p>Accurate use of hand tools to create clock face parts</p> <p>Hand drill/Pillar drill for clock shaft</p> <p>Construction techniques</p> <p>2D design computer program</p>	<p>Clock with CAD generated decoration continued ...</p> <p>Finishing techniques sanding and painting</p> <p>Manufactured Boards theory</p> <p>Evaluation with suggestions for modifications</p> <p>DRAWING SKILLS</p> <p>Practice drawing in isometric, with and without grid paper</p> <p>Shading techniques</p>



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Year 8				<p>Picture frame With cad generated decoration</p> <p>Use of CAD, importing vectors.</p> <p>Modification and adaptation of vectors.</p> <p>Use of measuring and marking tools</p> <p>Wood joints</p> <p>Use of hand tools</p> <p>Use of CAM; laser cut decoration (fully checked by teacher)</p>	<p>Picture frame With cad generated decoration continued...</p> <p>Joining techniques</p> <p>Timbers - hardwoods and softwoods</p> <p>Plastics theory - thermoplastics</p> <p>CAD/CAM - theory</p> <p>Memphis inspired Mobile phone holder</p> <p>Slot construction</p> <p>Modelling skills</p>	<p>Memphis inspired Mobile phone holder continued</p> <p>CAD/CAM</p> <p>2D design computer program</p> <p>Painting techniques</p> <p>Finishing techniques</p> <p>Testing</p> <p>DRAWING SKILLS</p> <p>Practice drawing in isometric and exploded views</p> <p>Shading techniques</p>
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<p style="text-align: center;">Year 9</p>				<p>Flat pack shelving with CAD decoration</p> <p>Analysis of a brief</p> <p>Use of CAD, importing vectors.</p> <p>Modification and adaptation of vectors.</p> <p>Joining different materials</p> <p>Dowel joints</p> <p>Jigs and Templates</p> <p>Hand tools, machines and portable drill</p>	<p>Flat pack shelving with CAD decoration continued ...</p> <p>Use of CAD/CAM for decoration</p> <p>Joining techniques</p> <p>Finishing techniques</p> <p>Timbers properties</p> <p>Box with Art Deco inspired Coasters</p> <p>Art Deco theory</p> <p>Research skills</p> <p>Finger joints</p> <p>Rebates</p> <p>Housing joints</p> <p>How a Router works</p>	<p>Box with Art Deco inspired Coasters continued.....</p> <p>Lid construction techniques</p> <p>Laminating</p> <p>Varnishing techniques</p> <p>DRAWING SKILLS</p> <p>Practice drawing in isometric and exploded views</p> <p>Shading techniques</p>