



CURRICULUM PLAN – Year 10 Design and Technology

YEAR	TRINITY 2	MICHAELMAS 1	MICHAELMAS 2	LENT 1	LENT 2	TRINITY 1
10	<p>Double lessons</p> <p><i>Organiser</i></p> <p>Introduction to Polymers /manufacturing processes using polymers. Designing through modelling / Anthropometric data & ergonomics (recap) Introduction to use of Onshape and Photoshop/ Heat Transfer (sublimation printing) onto Polymers</p> <p>Material properties – what do we mean by this? Why is it so important? Linking to forces & stresses</p>	<p>Organiser</p> <p>Health & Safety in the workshop (recap) Manufacture of Desk tidy</p>	<p>LED Night Light project</p> <p>To understand the structure of the whole Design Process.</p> <p>Design Brief / Design Spec / Primary research / Technical drawings /</p> <p>Development of Design Ideas</p> <p>Development of CAD (2D Design)</p>	<p>LED Night Light project</p> <p>Manufacture of Lamp</p> <p>Production Log</p> <p>Testing and Evaluation</p>	<p>Pewter Casting</p> <p>Development of CAD & CAM (Techsoft Design & router)</p> <p>Development of Design Ideas</p> <p>Anthropometric data & ergonomics (recap)</p> <p>Manufacturing Specification</p>	<p>Pewter Casting</p> <p>Manufacture of keyring / jewellery piece</p> <p>Health & Safety in the workshop (recap)</p> <p>Production Log</p> <p>Testing and Evaluation</p>
		<p>Theory</p> <p>Polymers – thermoforming & thermosetting Processes used with polymers</p> <p>Issues linked to the environment</p> <p>Sustainability</p> <p>As designers, how can we design to protect the environment?</p> <p>28 Sept Tracking</p>	<p>Theory</p> <p>Natural and manufactured timbers – softwood, hardwood, manufactured boards</p> <p>Systems approach to designing</p> <p>13 Dec Tracking</p>	<p>Theory</p> <p>Developments in new materials</p> <p>Use of Product Analysis</p> <p>Energy generation and storage</p> <p>Year 10 Exam</p>	<p>Theory</p> <p>Metals and alloys – ferrous, non-ferrous, and alloys.</p> <p>New and emerging technologies</p> <p>30 Mar Reports</p>	<p>Theory</p> <p>Mechanical devices</p> <p>Different types of movement</p> <p>Introduction to the range of different mechanisms & machines</p>