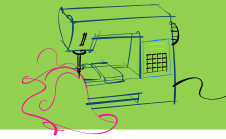




# Year 11 Curriculum Overview 2017-2018

## Subject: Product Design



Term		Content	Assessment
Autumn Term	Half Term 1	<p>Controlled Assessment</p> <p><b>Homework tasks:</b></p> <ul style="list-style-type: none"> <li>- Pupils will be given homework tasks reflecting the specification. They will be provided with an information sheet, task sheet and past paper questions. Answer sheets will be given the following week for pupils to self-assess.</li> </ul>	<p>Teacher based assessment</p> <p>Past paper questions</p> <p>Weekly revision homework</p>
	Half Term 2	<p>Controlled Assessment</p> <p><b>Homework tasks:</b></p> <ul style="list-style-type: none"> <li>- Pupils will be given homework tasks reflecting the specification. They will be provided with an information sheet, task sheet and past paper questions. Answer sheets will be given the following week for pupils to self-assess.</li> </ul>	<p>Teacher based assessment</p> <p>Past paper questions</p> <p>Weekly revision homework</p>
Spring Term	Half Term 3	<p><b>Classwork projects:</b></p> <p><i>Paper and card (modelling project)</i></p> <ul style="list-style-type: none"> <li>- Pupils will look at the process of creating paper and card and the different types of paper/card, the stock forms and how they are produced and used.</li> <li>- Pupils will create a card model based on a chosen project in preparation for their CA.</li> </ul> <p><i>Use of ICT (Information and Communication Technology)</i></p> <ul style="list-style-type: none"> <li>- Pupils will understand how ICT facilitates a wide range of manufacturing functions, e.g. just in time (JIT), video conferencing, software sharing, stock control, data transfer and remote manufacturing;</li> <li>- They will have an understanding of the application of CNC (Computer Numeric Control) in modern manufacturing as appropriate to a specific material area; understand how computer-aided manufacture (CAM) is used both in manufacturing in quantity and in the production of single items and small batches;</li> <li>- Pupils will understand how CAD/CAM allows for higher levels of accuracy, repeatability and efficiency.</li> </ul>	<p>Past paper questions.</p> <p>Assessed making activities and projects.</p> <p>Weekly revision homework</p> <p>One formal assessment on both classwork and homework projects.</p>

		<p><b>Homework tasks:</b></p> <ul style="list-style-type: none"> <li>- Pupils will be given homework tasks reflecting the specification. They will be provided with an information sheet, task sheet and past paper questions. Answer sheets will be given the following week for pupils to self-assess.</li> </ul>	
	<p><b>Half Term 4</b></p>	<p><b>Classwork projects:</b></p> <p><i>Manipulating and Combining Materials</i></p> <ul style="list-style-type: none"> <li>- Pupils will look at how materials can be combined and processed in order to create more useful, or desirable, properties; industrial contexts;</li> <li>- Pupils will see how a range of materials are prepared for manufacture, allowing for waste and fine finishing;</li> </ul> <p><i>Communication and representation of ideas</i></p> <ul style="list-style-type: none"> <li>- Pupils will use a range of graphical techniques such as annotated sketches, formal drawing conventions. They will use CAD to communicate design details in a clear and appropriate manner;</li> <li>- Pupils will develop a range of presentation techniques and media to portray materials, texture or finish such as mood boards, presentation drawings, digital photography, CAD; use line, tone, colour rendering using a range of media; • use formal page layout techniques as an aid to planning and presenting drawings and information; use a range of prototyping and modelling methods in order to explore design alternatives during the design process as well as a means of communicating proposals which can be used for evaluation purposes;</li> <li>- Pupils will use a range of ICT equipment and software to communicate, model, develop and present ideas.</li> </ul> <p><b>Homework tasks:</b></p> <ul style="list-style-type: none"> <li>- Pupils will be given homework tasks reflecting the specification. They will be provided with an information sheet, task sheet and past paper questions. Answer sheets will be given the following week for pupils to self-assess.</li> </ul>	<p>Past paper questions.</p> <p>Assessed making activities and projects.</p> <p>Weekly revision homework</p> <p>One formal assessment on both classwork and homework projects.</p>

<p><b>Summer Term</b></p>	<p><b>Half Term 5</b></p>	<p><i>Product Manufacture</i></p> <ul style="list-style-type: none"> <li>- Pupils will know how a range of materials are cut, shaped and formed to designated tolerances; the difference between quality control and quality assurance techniques;</li> <li>- Pupils will understand how to produce detailed working schedules, e.g. flow charts, production plans, identifying critical points, i.e. QA and QC, in the making process and providing solutions to possible problems;</li> <li>- They will learn to evaluate the quality of their personal project work and to devise modifications that will improve their products.</li> </ul> <p><i>Manufacturing systems</i></p> <ul style="list-style-type: none"> <li>- Pupils will understand that commercial manufacturing is a system, or group of sub-systems which requires (special buildings or places of work; – the organisation of people; – the organisation of tools and equipment; – risk assessment and compliance with health and safety regulations; – the organisation of materials; – information systems to help people communicate with each other reliably; – ways of changing the shape and form of materials to increase their usefulness; – ways of using tools and equipment to transform the materials into products; – the design and production of many products in a systematic way; – quality assurance procedures and quality checks to be made; – efficient working methods; – ways of safely taking care of the unwanted; – outputs of manufacturing i.e. disposing or recycling of waste materials, and ways of looking after the environment.</li> </ul> <p><b>Homework tasks:</b></p> <ul style="list-style-type: none"> <li>- Pupils will be given homework tasks reflecting the specification. They will be provided with an information sheet, task sheet and past paper questions. Answer sheets will be given the following week for pupils to self-assess.</li> </ul> <p>-</p>	<p>Past paper questions.</p> <p>Assessed making activities and projects.</p> <p>Weekly revision homework</p> <p>One formal assessment on both classwork and homework projects.</p>
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