

Year 9 - Design & Technology Curriculum Implementation Plan

Knowledge and Skills – Students will be taught to...	Reading, Oracy, Literacy and Numeracy	Formative Assessment (On-going)	Summative Assessment (Middle and end of project)	Link to GCSE Content
<ul style="list-style-type: none"> <li>• <b>Respond to the overarching themes of Commercial Production and ‘World of Work’, Environmental Factors and Enhancement Techniques.</b></li> <li>• Creatively respond to a context analysing all factors.</li> <li>• Write a detailed Design Brief that fully meets the need of their user.</li> <li>• Undertake appropriate research.</li> <li>• Write a comprehensive specification or criteria.</li> <li>• Respond to the work of others in producing a creative range of ideas that solve their brief.</li> <li>• Fully analyse ideas and explain how these impact on the development.</li> <li>• Identify and undertake appropriate further research.</li> <li>• Develop their chosen idea using a range of different techniques appropriate to their product.</li> <li>• Choose from a range of CAD programmes (such as 2D design, Photoshop, SketchUp) effectively to develop their idea.</li> <li>• Plan the use of appropriate materials and processes to be used for the manufacture of their product</li> <li>• Independently use an ever-increasing range of tools and processes in the safe manufacture of products.</li> <li>• Evaluate their product against all criteria and develop possible improvements.</li> </ul>	<p>Reading</p> <ul style="list-style-type: none"> <li>• Written context</li> <li>• Reading of gathered research prior to analysis.</li> <li>• Development of presentations of work to showcase their learning to others</li> </ul> <hr/> <p>Numeracy</p> <ul style="list-style-type: none"> <li>• Measuring techniques to ensure accuracy.</li> <li>• Weighing appropriate ingredients.</li> <li>• Consider dimensions for the manufacture of their product.</li> <li>• Dimension CAD files.</li> </ul> <hr/> <p>Oracy</p> <ul style="list-style-type: none"> <li>• Individual speaking:</li> <li>• Discussion of design work through peer feedback and through the evaluation of a product.</li> <li>• Present the outcomes of products produced and learning through small group presentations to peers and staff.</li> </ul>	<p>Questioning in lessons</p> <p>Whole class feedback</p> <p>Individual feedback in lessons</p> <p>Marking areas of focus and identifying areas for improvement.</p> <p>Peer and self-assessment of written work</p>	<p>Three Knowledge tests throughout the year focussing on:</p> <ul style="list-style-type: none"> <li>• Design Process</li> <li>• Materials</li> <li>• Manufacturing Processes</li> <li>• Equipment/Tools</li> <li>• Health and Safety</li> </ul> <p>Three marked D&amp;T project tasks focussing on:</p> <ul style="list-style-type: none"> <li>• Analysis and Evaluation</li> <li>• Design and Development</li> <li>• Planning and Manufacture</li> </ul> <p>These three areas will be graded and the average used as students ‘Working At’ grade for D&amp;T.</p>	<p>Assessment reflects the 50/50 weighting between coursework and exam.</p> <p>Developing ability to respond to more sophisticated exam questions building in complexity.</p> <p>Demonstrating that their work follows a clear and iterative design process.</p> <p>Choosing from a wide range of material areas that can be focussed upon for GCSE courses.</p> <p>Independently make use of CAD/CAM required in GCSE NEA’s</p> <p>Selecting appropriate tools and processes using them skilfully to create high quality products.</p> <p>Demonstrate an understanding of Health and Safety working practice in different environments in D&amp;T.</p> <p>Meeting users or target market groups needs effectively through the development of a final product.</p>