

<h1>Year 10</h1> <h2>Resistant Materials</h2>			
<b>1</b> <b>Research &amp; Analysis</b>	<ul style="list-style-type: none"> <li>Some analysis of related products or systems undertaken.</li> <li>Design criteria reflects most of the analysis undertaken.</li> <li>Some consideration has been taken of the likely consumer/user.</li> </ul>	<ul style="list-style-type: none"> <li>Good analysis of relevant products or systems undertaken.</li> <li>Design criteria which reflects the analysis undertaken.</li> <li>Target market for product has been identified.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed analysis of relevant existing products or systems undertaken related to design intentions.</li> <li>Clear and specific design criteria identified, reflecting the analysis undertaken.</li> <li>Target market identified and the intended consumer/user profiled.</li> </ul>
<b>2</b> <b>Designing and Developing Skills</b>	<ul style="list-style-type: none"> <li>Design ideas show some degree of creativity and further development.</li> <li>Adequate development work achieved through working with a range of techniques and modelling (including CAD where appropriate).</li> <li>An appropriate design strategy, with some evidence of planning, adopted for some aspects.</li> </ul>	<ul style="list-style-type: none"> <li>Imaginative ideas demonstrating a degree of creativity, which are further developed to take account of ongoing research.</li> <li>Good development work achieved through working with a variety of techniques and modelling (including CAD where appropriate).</li> <li>An appropriate design strategy, with evidence of planning, adopted for most aspects.</li> </ul>	<ul style="list-style-type: none"> <li>Imaginative and innovative ideas have been developed, demonstrating creativity, flair and originality. Further developments made to take account of ongoing research.</li> <li>Excellent development work through experimentation with a wide variety of techniques and modelling (including CAD where appropriate) in order to produce a final design solution.</li> <li>A coherent and appropriate design strategy, with clear evidence of a planned approach, adopted throughout.</li> </ul>
<b>3</b> <b>Making Skills</b>	<ul style="list-style-type: none"> <li>Final outcome shows good level of making/modelling/finishing skills.</li> <li>The outcome requires further development in order to be suitable for the target market.</li> <li>Applied quality control checks broadly but superficially.</li> </ul>	<ul style="list-style-type: none"> <li>Final outcome shows very good level of making/modelling/finishing skills.</li> <li>The outcome is suitable for the target market and could be commercially viable with further development.</li> <li>Quality control checks applied in the manufacture of the product.</li> </ul>	<ul style="list-style-type: none"> <li>Final outcome(s) shows a high level of making/modelling/finishing skills and accuracy.</li> <li>The outcome has the potential to be commercially viable and is suitable for the target market.</li> <li>Quality controls are evident throughout the project and it is clear how accuracy has been achieved.</li> </ul>

Continued on page 2...

<h1>Year 10</h1> <h2>Resistant Materials</h2>			
<b>4</b> <b>Technical Knowledge &amp; Understanding</b>	<ul style="list-style-type: none"> <li>• Developments of design solutions are influenced to some extent by factors relating to social, moral, environmental and sustainability issues.</li> <li>• Materials/ingredients and components selected with some regard to their working properties.</li> <li>• Used appropriate materials, components, equipment and processes correctly and safely (including CAM).</li> </ul>	<ul style="list-style-type: none"> <li>• Development of design proposals take into account the main aspects relating to a variety of social, moral, environmental and sustainability issues.</li> <li>• Appropriate materials/ingredients and components selected with regard to their working properties.</li> <li>• Selected and used appropriate tools, materials and/or technologies including, where appropriate, CAM correctly and safely.</li> </ul>	<ul style="list-style-type: none"> <li>• The implications of a wide range of issues including social, moral, environmental and sustainability, are taken into consideration and inform the development of the design proposals.</li> <li>• Appropriate materials/ingredients and components selected with full regard to their working properties.</li> <li>• Selected and used appropriate tools, materials and/or technologies including, where appropriate, CAM correctly, skilfully and safely.</li> </ul>
<b>5</b> <b>Evaluation &amp; Testing</b>	<ul style="list-style-type: none"> <li>• Evidence of some testing and evaluation leading to the production of the final outcome.</li> <li>• Some evidence of testing against the design criteria and/or the product/manufacturing specification.</li> <li>• Some improvements or modifications to product suggested.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate testing and evaluation evident throughout the designing and making process.</li> <li>• Most aspects of the final outcome have been tested against the design criteria and/or the product/manufacturing specification.</li> <li>• Evaluate and justify the need for improvements or modifications to the product.</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed testing and evaluation as appropriate throughout the designing and making process taking account of client/user or third party opinion.</li> <li>• All aspects of the final outcome have been tested against the design criteria and/or the product/manufacturing specification.</li> <li>• Evaluate and justify the need for modifications to the product and consideration given as to how the outcome might need to be modified for commercial production.</li> </ul>
<b>6</b> <b>Presentation &amp; Communication</b>	<ul style="list-style-type: none"> <li>• Design proposal shows excessive duplication of information and a lack of brevity and focus resulting in irrelevant content.</li> <li>• Ideas and decisions communicated at a simplistic level with a limited grasp of the concepts involved and a limited use of technical vocabulary.</li> <li>• Numerous errors in grammar, punctuation and spelling.</li> </ul>	<ul style="list-style-type: none"> <li>• Design proposal shows some skill in choice of material for inclusion but includes some irrelevant content.</li> <li>• Most decisions communicated with some clarity and with some use of technical language.</li> <li>• There are a small number of errors in grammar, punctuation and spelling.</li> </ul>	<ul style="list-style-type: none"> <li>• Design proposal is focused, concise and relevant and demonstrates an appropriate selection of material for inclusion.</li> <li>• All decisions communicated in a clear and coherent manner with appropriate use of technical language.</li> <li>• The text is legible, easily understood and shows a good grasp of grammar, punctuation and spelling.</li> </ul>