

## Revision in Design and Technology: Product Design

The exam: 50% of the GCSE grade. 2 hours, 100 marks, 19<sup>th</sup> June

<p><b>Section A</b> 20 marks (20 minutes)</p> <p>Multiple choice questions Short answer questions</p>	<p><b>Section B</b> 30 marks (30 minutes)</p> <p>Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles.</p>	<p><b>Section C</b> 50 marks (60 minutes)</p> <p>A mixture of short answer and extended response questions.</p>
<p><b>Content</b> Core technical principles</p> <ul style="list-style-type: none"> <li>- new and emerging technologies</li> <li>- energy generation and storage</li> <li>- developments in new materials</li> <li>- systems approach to designing</li> <li>- mechanical devices</li> <li>- materials and their working properties.</li> </ul>	<p><b>Content</b> Specialist technical principles <b>Only timbers – there is a choice. We only study timbers</b></p> <ul style="list-style-type: none"> <li>- selection of materials or components</li> <li>- forces and stresses</li> <li>- ecological and social footprint</li> <li>- sources and origins</li> <li>- using and working with materials</li> <li>- stock forms, types and sizes</li> <li>- scales of production</li> <li>- specialist techniques and processes</li> <li>- surface treatments and finishes.</li> </ul>	<p><b>Content</b> Design and making principles</p> <ul style="list-style-type: none"> <li>- investigation, primary and secondary data</li> <li>- environmental, social and economic challenge</li> <li>- the work of others</li> <li>- design strategies</li> <li>- communication of design ideas</li> <li>- prototype development</li> <li>- selection of materials and components</li> <li>- tolerances</li> <li>- material management</li> <li>- specialist tools and equipment</li> <li>- specialist techniques and processes</li> </ul>

### Revision resources:

On Teams	Revision schedules for our remaining lessons All ppt, worksheets and homework sheets from the course Access to the text book
Seneca learning	Assignments following our revision lessons. These are recommended for before the revision lessons to prepare You can also complete any part of the course here independently <a href="https://senecalearning.com/en-GB/">https://senecalearning.com/en-GB/</a>
In school	White revision books for questions, you can take these home when we have finished I have the answers to worksheets and homework sheets from teams
BBC Bitesize	Information, videos and quizzes <a href="https://www.bbc.co.uk/bitesize/examspecs/zby2bdm">https://www.bbc.co.uk/bitesize/examspecs/zby2bdm</a>
Technology student	The information is better than the website looks! <a href="https://www.technologystudent.com/despro_flash/NEW_GCSE3.html">https://www.technologystudent.com/despro_flash/NEW_GCSE3.html</a>
Youtube	Mr Ridley Design and Technology When looking at other teachers videos, be aware that last year the exam was different due to COVID. You need to learn all of the information rather than miss bits out <a href="https://www.youtube.com/@mrridleydesigntechology">https://www.youtube.com/@mrridleydesigntechology</a>