



## Year 10 Design & Technology GCSE Yearly Plan



| Term                                      | Areas to be Covered   |
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| <b>AUTUMN<br/>TERM 1</b>                  | <p><b>Focussed Skills Projects:</b><br/>Depending on whether students choose to study Product Design, Textiles or Graphics will determine on what specialist material mini project will be completed.<br/>Students will complete a range of skill based mini projects to improve their skills working with a range of materials tools and techniques.</p>   |
|   | <p><b>Exam Practice – Specialist Technical Principles:</b><br/>Knowledge required of a specific material: Timber based materials / Textile based materials / Papers &amp; Boards<br/>All theory lessons will link to students' chosen material and will be a mixture of practical, research and revision lessons.</p>   |
|   | <p><b>Research Home works:</b><br/>Students will be completing a range of home works which requires them to research and analyse linking to the Designing &amp; Making principles section of the exam and links to their coursework they will be producing in YR 11</p>   |
|   | <b>End of Unit Test on Specialist Technical Principles</b>  |
| <b>HALF-TERM</b>                          |   |
| <b>AUTUMN<br/>TERM 2</b>                  | <p><b>Practice Mini NEA:</b><br/>Students will start on a Mini coursework project which will be linked to their specialist material of choice. For product design students will be researching, designing and manufacturing a light source. This product will be solving a problem and they will be working with a user too.<br/><b>Brief &amp; Spec:</b><br/>Students will be completing a brief and a thorough specification on 1 sheet of A4 on the computer. They will then produce an Inspiration board for their chosen company. They will need to ensure they include similar products and inspiration as well as the style to get level 8 / 9. They will then complete a written evaluation summarising their findings from their board. This work will be marked and then they will act on feedback to improve</p> |
|   | <p><b>Exam Prep - Core Technical Principles:</b><br/>Knowledge required of: New &amp; Emerging Technologies / Energy Generation &amp; Storage / Developments in new materials / Systems approach to designing / Mechanical Devices / Materials &amp; their working properties.</p>  |
|   | <b>End of Unit Test on Core Technical Principles</b>  |
| <b>END OF TERM<br/>CHRISTMAS HOLIDAYS</b> |   |
| <b>SPRING<br/>TERM 1</b>                  | <p><b>Practice Mini NEA:</b><br/><b>Ideas / Iterations:</b><br/>Students will be completing their rapid design ideas. These need to be two pages hand drawn designs with the direction of light added. They must use their inspiration sheets to inform this work.<br/>2) Next students will have 2 lessons of theory on basic materials they will be using and joining techniques which will be aided by the two display boards made by super rich. 3) Students will now come up with their design idea using Sketch Up, this will be annotated on A4 to be put into their folios.</p>   |
|   | <p><b>Exam Prep – Designing &amp; Making Principles</b><br/>Knowledge required of: Investigation, primary &amp; secondary data / Environmental, social &amp; economic challenge / The work of others / Design Strategies / Communication of design ideas / Prototype development / Specialist Material</p>  |
|   | <b>End of Unit Test on Designing &amp; Making Principles</b>  |
| <b>HALF TERM</b>                          |   |
| <b>SPRING<br/>TERM 2</b>                  | <p><b>Practice Mini NEA:</b><br/><b>Iterations / Final Design:</b><br/>1) Students will re-do their sketch up design and annotations. This will be after they have acted on feedback and on peer assessment. (Iteration) 2) Students will next have THE CHAT which involves them talking to the teacher or technician and deciding what to change about their design (Iteration). 3) After THE CHAT students will model their design idea to scale. 4) Students will next re do their design on sketchup using their model. This will be Re-marked on the learning ladder. All work will be going into their folios.</p>  |

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|   | <p><b>Exam Prep – Practice Questions:</b><br/>Students will be going through a number of practice questions in class and set for home works. Students will be learning of the different key words used in the exam and will develop their ability to answer longer mark questions.</p>   |
|   | <p><b>End of Unit Test on a number of questions spanning over the whole spec for core.</b></p>   |
| <p><b>END OF TERM<br/>EASTER HOLIDAYS</b></p> |  |
| <p><b>SUMMER<br/>TERM 1</b></p>               | <p><b>Practice Mini NEA:<br/>Practical / Manufacture:</b><br/>Students will be using their final design page and notes from their chat with the teacher or the technician to successfully manufacture their lamp design. This final product will be assessed. These lessons will be twice a week</p>   |
|   | <p><b>Exam Prep – Revision:</b><br/>Students will be covering everything that have looked at throughout the year and will be taught how best to revise and will go through strategies for retaining information. There will also be a mixture of practical lessons and theory lessons linked to this topic.</p>  |
|   | <p><b>Mock Exam</b></p>  |
| <p><b>HALF TERM</b></p>                       |  |
| <p><b>SUMMER<br/>TERM 2</b></p>               | <p><b>Students start their GCSE 50% Coursework (NEA)</b><br/> <b>NEA - Section A (Identifying &amp; Investigating design possibilities) 10 Marks</b><br/> Design possibilities identified and thoroughly explored, directly linked to a contextual challenge demonstrating excellent understanding of the problems/opportunities. A user/client has been clearly identified and is entirely relevant in all aspects to the contextual challenge and student has undertaken a comprehensive investigation of their needs and wants, with a clear explanation and justification of all aspects of these. Comprehensive investigation into the work of others that clearly informs ideas. Excellent design focus and full understanding of the impact on society including; economic and social effects. Extensive evidence that investigation of design possibilities has taken place throughout the project with excellent justification and understanding of possibilities identified.</p> |

## 2.2 Assessments

| Paper 1   |
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| <p><b>What's assessed</b></p> <ul style="list-style-type: none"> <li>• Core technical principles</li> <li>• Specialist technical principles</li> <li>• Designing and making principles</li> </ul>   |
| <p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>• Written exam: 2 hours</li> <li>• 100 marks</li> <li>• 50% of GCSE</li> </ul>   |
| <p><b>Questions</b></p> <p><b>Section A – Core technical principles (20 marks)</b><br/>A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding.</p> <p><b>Section B – Specialist technical principles (30 marks)</b><br/>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 – Designing and making principles (50 marks)</b><br/>A mixture of short answer and extended response questions.</p> |

| Non-exam assessment (NEA)  |
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| <p><b>What's assessed</b></p> <p>Practical application of:</p> <ul style="list-style-type: none"> <li>• Core technical principles</li> <li>• Specialist technical principles</li> <li>• Designing and making principles</li> </ul>   |
| <p><b>How it's assessed</b></p> <ul style="list-style-type: none"> <li>• Non-exam assessment (NEA): 30–35 hours approx</li> <li>• 100 marks</li> <li>• 50% of GCSE</li> </ul>  |
| <p><b>Task(s)</b></p> <ul style="list-style-type: none"> <li>• Substantial design and make task</li> <li>• Assessment criteria: <ul style="list-style-type: none"> <li>• Identifying and investigating design possibilities</li> <li>• Producing a design brief and specification</li> <li>• Generating design ideas</li> <li>• Developing design ideas</li> <li>• Realising design ideas</li> <li>• Analysing &amp; evaluating</li> </ul> </li> <li>• In the spirit of the iterative design process, the above should be awarded holistically where they take place and not in a linear manner</li> <li>• Contextual challenges to be released annually by AQA on 1 June in the year prior to the submission of the NEA</li> <li>• Students will produce a prototype and a portfolio of evidence</li> <li>• Work will be marked by teachers and moderated by AQA</li> </ul> |