

| Year 9 Technology/3D Design Mid-Term Plan<br>(1 x 75 min lesson per 2 weeks = 18 lessons) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                   |
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|                                                                                           | Autumn 1/Spring 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Autumn 2/Summer 1 | Spring 1/Summer 2 | Spring 2/Autumn 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Summer 1/Autumn 2 | Summer 2/Spring 1 |
| Topic                                                                                     | Wooden Box Project [Practical] (9 x 75 mins)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |                   | Wooden Box project [Design] (9 x 75 mins)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   |                   |
| Project Learning Goal                                                                     | Be able to make a wooden box whilst showing an understanding of the properties of timber and the tools/methods used to shape it.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |                   | Be able to design and make the lid for a wooden box that you will make as part of a focused practical task. It must be based on a given theme (20 <sup>th</sup> Century Design Movements) and demonstrate the effective use of research to influence your work.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                   |                   |
| Big Ideas                                                                                 | <ul style="list-style-type: none"> <li>Master Practical Skills</li> <li>Master Materials Knowledge/Tool Use</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                   | <ul style="list-style-type: none"> <li>Master Design/Modelling Skills</li> <li>Master The Design Process</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                   |
| Key Knowledge                                                                             | <ul style="list-style-type: none"> <li>Understand how to complete a focused practical task based on a given design drawing.</li> <li>Revisit practical skills developed in year 7 and year 8, including the selection and use of an appropriate range of relevant tools and processes.</li> <li>Understand workshop health &amp; safety, and safe and proper use of tools and equipment.</li> <li>Understand project requirements/aims, and evaluation of outcomes.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                |                   |                   | <ul style="list-style-type: none"> <li>Understand how to produce a design folder centered around a given topic/theme.</li> <li>Revisit the design process from year 7 and year 8 and understand how to apply it as expected for the KS4 GCSE Art &amp; Design: Three-Dimensional Design course.</li> <li>Understand how to research and investigate the theme when generating design ideas for the lid of their boxes.</li> </ul>                                                                                                                                                                                                                                                                                                                         |                   |                   |
| Key Vocabulary                                                                            | Steel Rule, Tenon Saw, Try-Square, Bench Hook, Marking Gauge, Plane, Pillar Drill, Sanding Machine. Timber, Softwood, Coniferous, Hardwood, Deciduous, Manufactured Boards, Design Brief, Orthographic Drawing, Manufacturing Plan, Evaluation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |                   | Design Process, Design Brief, Primary Research, Secondary Research, Critical Study, Target Market, Mood Board, Collage, Existing Product Analysis, Design Specification/Success Criteria, Design Ideas, Final Design Intention, CAD and CAM (Computer Aided Design/Manufacture).                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                   |                   |
| Topic Relevance                                                                           | These areas reinforce essential KS3 design and technology skills that form a strong foundation for GCSE Art & Design: Three-Dimensional Design. Completing <b>focused practical tasks</b> based on design drawings develops accuracy, planning, and interpretation—all vital for turning creative concepts into tangible outcomes. Revisiting <b>practical skills and tool use</b> builds confidence in material manipulation and craftsmanship, while embedding safe, efficient working habits through <b>health &amp; safety awareness</b> . Understanding project aims and evaluating outcomes fosters a reflective approach, encouraging students to refine their work and meet design intentions—key practices that directly transfer to three-dimensional design at GCSE level. This continuity supports progression in both creative thinking and technical execution. |                   |                   | These skills help bridge KS3 learning with expectations in GCSE Art & Design: Three-Dimensional Design. Creating a <b>design folder based on a theme</b> develops planning, visual communication, and creative storytelling—key skills for presenting design journeys at KS4. Revisiting and applying the <b>design process</b> from earlier years strengthens understanding of research, idea generation, development, and evaluation. Investigating the theme for the <b>lid design of their boxes</b> encourages contextual research and creativity, guiding students to produce informed, imaginative, and purposeful outcomes—just as required at the GCSE level. This progression supports confident, independent design thinking and presentation. |                   |                   |
| Assessment                                                                                | Do It Now/Exit Tickets, Low-stakes quiz (Knowledge Check) (week 4-5) Practical Evaluation, Key assessment at the end of project (week 8-9).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                   | Do It Now/Exit Tickets, Low-stakes quiz (Knowledge Check) (week 4-5) Practical Evaluation, Key assessment at the end of project (week 8-9).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |                   |
| Practical Skills Mastery                                                                  | <ul style="list-style-type: none"> <li>Be able to use tools, equipment, materials and components with precision.</li> <li>Be able to organise work to enable the carrying out of processes accurately and consistently.</li> <li>Be able to develop and apply solutions during the making process to correct any mistakes.</li> <li>Be able to apply a high-quality finish to the product.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |                   | <ul style="list-style-type: none"> <li>Be able to produce a well-presented design folder that supports the chosen theme.</li> <li>Be able to show realisation of the final design through appropriate selection of media and production processes.</li> <li>Be able to apply a high-quality finish to the product.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |                   |
| Theoretical Knowledge Mastery                                                             | <ul style="list-style-type: none"> <li>Be able to explain the difference between deciduous and coniferous timbers, giving examples of both hardwoods and softwoods.</li> <li>Be able to describe what a manufactured board is and give a range of examples.</li> <li>Be able to identify and explain the use of woodworking tools.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                   |                   | <ul style="list-style-type: none"> <li>Be able to use a Design Process effectively to inform new design concepts.</li> <li>Analyse the task and specification fully, to produce appropriate design proposals.</li> <li>Be able to use a range of strategies to develop appropriate ideas, responding to gathered information.</li> <li>Be able to draw conclusions from research and produce a detailed evaluation.</li> </ul>                                                                                                                                                                                                                                                                                                                            |                   |                   |

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|                                                                                           | Autumn 1/Spring 2                                                                                                                                                                                                                                                                                                                                                         | Autumn 2/Summer 1 | Spring 1/Summer 2 | Spring 2/Autumn 1                                                                                                                                                                  | Summer 1/Autumn 2 | Summer 2/Spring 1 |
| Start and End Point                                                                       | Start: Project Introduction – Understanding of task and success criteria, and address misconceptions from previous projects.<br>End: Key Assessments and final practical evaluation.                                                                                                                                                                                      |                   |                   | Start: Project Introduction – Understanding of task and success criteria and address misconceptions from previous project.<br>End: Key Assessments and final practical evaluation. |                   |                   |
| Values Curriculum                                                                         | Knowledge, Continuous improvement, Character, High Expectations & Leadership<br>Resilience through independent practical and design to show creativity and problem-solving.<br>Respect of health & safety, facilities and consideration to others.<br>Responsibility with potentially dangerous tools and equipment when in a workshop.<br>Supporting peers and teamwork. |                   |                   |                                                                                                                                                                                    |                   |                   |
| Students Areas of Assessment                                                              | Knowledge: Refer to all content of KS3 Health & Safety, timber, metals, plastics, tools, design process, electronics.<br>Skills: Refer to all content of KS3 Woodwork, Metalwork, practical skills, and ability to use tools safely and accurately, soldering, use of CAD/CAM.<br>Application: Planning, application of practical skills, and evaluating.                 |                   |                   |                                                                                                                                                                                    |                   |                   |
| Memory Retrieval                                                                          | Mastery curriculum revisits topics (health & safety, materials, tools, processes) across subsequent lessons.<br>Retrieval practice through questioning, cold-calling, recap of tasks, and practical.                                                                                                                                                                      |                   |                   |                                                                                                                                                                                    |                   |                   |
| Disciplinary Literacy                                                                     | Reading and interpreting project requirements, careful and considered planning, writing evaluations to reflect on outcomes and successes. Using subject-specific vocabulary accurately.                                                                                                                                                                                   |                   |                   |                                                                                                                                                                                    |                   |                   |
| Alignment with Long Term Plan                                                             | The mid-term plans reflect the progression and content outlined in the long-term plan and Big Ideas document.<br>Practical and theoretical elements are consistently aligned with skills needed to access GCSE level curriculum at KS4.                                                                                                                                   |                   |                   |                                                                                                                                                                                    |                   |                   |
| Context                                                                                   | Career Pathways: Topics within the subject are linked to trades, manufacturing industry and design careers.                                                                                                                                                                                                                                                               |                   |                   |                                                                                                                                                                                    |                   |                   |