

## Biddulph High School Curriculum Intent

To deliver a broad and enriching curriculum through engaging and challenging lessons that provide a wide range of opportunities for all students to achieve their potential.

Students will all be prepared to take their next steps in a diverse and ever changing future ready to make a positive contribution to society.

Through a broad programme of extracurricular activities students will have the opportunities to showcase their talents and experience new challenges.

We value individuals and all that they can offer as well as supporting each other with kindness and empathy.

### Curriculum Intent for Product Design:

Our aim in the Design and Technology department is to encourage students to produce creative work which explores, records and reflects on ideas and experiences in their own and others' lives. We aim to encourage open minded, creative, critical, reflective thinkers who have the courage and confidence to contribute to the world around them. We provide a safe and respectful atmosphere where their creativity can flourish, they can problem solve and are not afraid to make mistakes. The curriculum in Design and Technology allows students to experience a range of different areas in design including Product Design and Graphic Design. We aim for students to realise the relevance of design in our modern culture whilst raising the awareness of career choices and engendering a love of the subject.

All teachers will follow the schemes of work provided by the department. This will ensure that all students receive the same high-quality provision. All units of work will provide a clear outline of the knowledge and skills required and assessments will ensure that this knowledge has been retained and that skills can be evidenced.

Teachers will ensure that gaps are closed through regular monitoring within the classroom. DINT activities will allow for interleaving and recap of previous learning. Misconceptions will be identified through effective questioning and the regular inspection of student work.

Product Design: Long Term Overview						
Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
9	This unit introduces students to Product design. It teaches a range of essential research and analytical skills and techniques to help them to engage and explore the subject more fully. Students will become designers and work in the style of Art Deco to inspire their own creations.			Students will become designers and work in the style of an iconic Art Deco designer to create their own piece of practical work in modelling it in card. The practical work will be a jewellery box & item of Jewellery or speaker on their chosen iconic Art Deco Designer.		
10	Project 1: Students will be completing the unit of work started in year 9 based upon Art Deco, they will be making their final designs using a range of suitable materials to create a completed final prototype.		Project 2: Students will be completing a design and make project based upon natural forms and the work of architect Antonio Gaudi. They will create research, drawing ideas, development with the use of a range of materials including clay and woods.		Final design making of the bird box for project 2	
11	Project 3: Students will be working on a project inspired by model maker and designer Joshua Smith with the use of foam boards and card to create their architectural models.		Exam Project released- developing ideas, starting points, research and drawings	Developing exam project with designer inspiration, experiments and trials	Exam preparation/Return to Portfolio project to make improvements	N/A

**Product Design: Medium Term Overview**

<b>Year 10</b>	<b>Product Design</b>	<b>Unit Title: Bird Box/Gaudi Component 1 – 60% of final grade.</b>	<b>Term 1</b>
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<b>Overview/Intent</b>	This unit introduces students to GCSE Product design. They will gain an understanding of what product design is and how it has evolved in such a short space of time. It teaches a range of essential research and analytical skills and techniques to help them to engage and explore the subject in depth. Students will become designers and work in the style of iconic Architect Antonio Gaudi to inspire their own creations for a bird box.
<b>Assessment</b>	<b>Assessment will be done on the research section of the sketchbook. Students will get a score out of 30 for AO1 &amp; AO2</b>

<p><b><u>Essential Knowledge (what must students know):</u></b></p> <ul style="list-style-type: none"> <li>• Know what product design is and understand about some key iconic products and how they have evolved over time.</li> <li>• How to complete a successful design research into the theme of design eras, birds, bird boxes</li> <li>• How to create a fact file and be able to discuss the work of a designer.</li> <li>• develop ideas through investigations informed by selecting and critically analysing sources</li> <li>• Know they key product analysis key terms and be able to use these to analyse a given product</li> <li>• Be able to use the work of others to influence own work in clay</li> </ul>	<p><b><u>Essential Skills (what must students be able to demonstrate):</u></b></p> <p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate how to present research to a high standard taking care and pride in work</li> <li>• Be able to analyse a product given a set of subject specific key words and Know the meanings of the key words used to analyse a product</li> <li>• Know about the work and approaches of three-dimensional designers from contemporary and/or historical contexts, periods, societies and cultures</li> <li>• Understand contemporary and/or historical environments, situations or issues</li> </ul>	<p><b>Lessons:</b></p> <table border="1"> <tr> <td>04 September 2023</td> <td>Recap and intro to GCSE &amp; front cover in sketchbook</td> </tr> <tr> <td>11 September 2023</td> <td>What is product design?</td> </tr> <tr> <td>18 September 2023</td> <td>Design Styles/Alessi</td> </tr> <tr> <td>25 September 2023</td> <td>Design Styles/Modernism</td> </tr> <tr> <td>02 October 2023</td> <td>Antonio Gaudi research</td> </tr> <tr> <td>09 October 2023</td> <td>Bird box research &amp; analysis</td> </tr> <tr> <td>16 October 2023</td> <td>Sketchbooks - drawing &amp; recording</td> </tr> <tr> <td>23 October 2023</td> <td>Design ideas</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>06 November 2023</td> <td>Design ideas</td> </tr> <tr> <td>13 November 2023</td> <td>Design development drawings</td> </tr> <tr> <td>20 November 2023</td> <td>Design development drawings</td> </tr> <tr> <td>27 November 2023</td> <td>clay/tiles in wooden frame</td> </tr> <tr> <td>04 December 2023</td> <td>WORK EX</td> </tr> <tr> <td>11 December 2023</td> <td>WORK EX</td> </tr> <tr> <td>18 December 2023</td> <td>photos of tiles &amp; mount in sketchbook &amp; DIRT time</td> </tr> </table>	04 September 2023	Recap and intro to GCSE & front cover in sketchbook	11 September 2023	What is product design?	18 September 2023	Design Styles/Alessi	25 September 2023	Design Styles/Modernism	02 October 2023	Antonio Gaudi research	09 October 2023	Bird box research & analysis	16 October 2023	Sketchbooks - drawing & recording	23 October 2023	Design ideas			06 November 2023	Design ideas	13 November 2023	Design development drawings	20 November 2023	Design development drawings	27 November 2023	clay/tiles in wooden frame	04 December 2023	WORK EX	11 December 2023	WORK EX	18 December 2023	photos of tiles & mount in sketchbook & DIRT time
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<ul style="list-style-type: none"> <li>• use drawing skills for different needs and purposes, appropriate to the area(s) of study used. Drawing may take the form of maquette, scale model(s) and computer-aided design using appropriate media and materials</li> <li>• How to develop a design idea with the use of strategies to help to do so</li> </ul> <p><b>Terminology:</b>  <b>Iconic, Product analysis, function, cost, customer, user, function, environment, ergonomics, aesthetics, Alessi, Liberty, Gaudi, inspiration.</b></p>		
<p><b>Careers Links:</b>          Students will look at roles within the design industry and study the work of an existing designer.</p>	<p><b>Enrichment:</b> Green power car</p>	<p><b>MYPB:</b> Creativity, Evaluation, Innovation, self motivation, active listening, Responsibility</p>

<b>Product Design: Medium Term Overview</b>			
Year 10	Product Design	Unit Title: Bird Box/Gaudi Component 1 – 60% of final grade.	Term 2
<b>Overview/Intent</b>	This unit follows on from term 1, it is all about refinement, development, modelling and planning for making. Students will be able to develop and refine their final 2D designs into 3D forms using traditional model making techniques, processes and equipment to do so before making their final prototypes in a medium of their choosing.		
<b>Assessment</b>	<b>Assessment will be done on this section of their work which will be documented in their sketchbooks through a series of drawings, notes, photographs of 3D models and outcomes and sketches to explain the making process. This will cover AO2 &amp; AO3</b>		

<p><b>Essential Knowledge (what must students know):</b></p> <ul style="list-style-type: none"> <li>• Health and safety when model making and use safe working practices in the workshop.</li> <li>• Know how to use model making materials and equipment skilfully and accurately to make model</li> <li>• How to construct an orthographic working drawing of their final design</li> <li>• apply an understanding of relevant Three-Dimensional Design practices in the creative and cultural industries to their work</li> <li>• How to use analytical and evaluative words to talk about their work</li> <li>• Know about materials used in construction, their features and uses</li> <li>• refine their ideas as work progresses through researching, selecting, analysing, constructing and presenting artefact(s)/product(s)/personal outcome(s)</li> <li>• use visual language critically as appropriate to their own</li> </ul>	<p><b>Essential Skills (what must students be able to demonstrate):</b></p> <p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate how to construct a number of various models and Marquette’s using various techniques to do so skilfully and safely.</li> <li>• Complete a working drawing that is successful enough to allow a 3<sup>rd</sup> party to work from.</li> <li>• Document in sketchbooks the techniques and processes and be able to analyse and evaluate the success of these.</li> <li>• Knowledge about materials they could use so they are able to make informed judgements.</li> </ul>	<p><b>Lessons:</b></p> <table border="1"> <tr> <td>08 January 2024</td> <td>Orthographic working drawing</td> </tr> <tr> <td>15 January 2024</td> <td>Card model bird box</td> </tr> <tr> <td>22 January 2024</td> <td>Clay models for bird box</td> </tr> <tr> <td>29 January 2024</td> <td>photos of model &amp; developments</td> </tr> <tr> <td>05 February 2024</td> <td>photos of model &amp; developments</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>19 February 2024</td> <td>drawings of making</td> </tr> <tr> <td>26 February 2024</td> <td>wood research</td> </tr> <tr> <td>04 March 2024</td> <td>plastics research</td> </tr> <tr> <td>11 March 2024</td> <td>making/modelling</td> </tr> <tr> <td>18 March 2024</td> <td>making/modelling</td> </tr> </table>	08 January 2024	Orthographic working drawing	15 January 2024	Card model bird box	22 January 2024	Clay models for bird box	29 January 2024	photos of model & developments	05 February 2024	photos of model & developments			19 February 2024	drawings of making	26 February 2024	wood research	04 March 2024	plastics research	11 March 2024	making/modelling	18 March 2024	making/modelling
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<p>creative intentions and chosen area(s) of Three-Dimensional Design through effective and safe use of: <input type="radio"/> media <input type="radio"/> materials <input type="radio"/> techniques <input type="radio"/> processes <input type="radio"/> technologies</p> <p><b>Terminology:</b>  <b>Models, Marquette’s, orthographic drawing, materials, techniques, processes, skilful, accuracy.</b></p>		
<p><b>Careers Links:</b>          Students will look at roles within the design industry and study the work of an existing designer.</p>	<p><b>Enrichment:</b> Green power car</p>	<p><b>MYPB:</b> Creativity, Evaluation, Innovation, self motivation, active listening, Responsibility</p>

### Product Design: Medium Term Overview

Year 10	Product Design	Unit Title: Bird Box/Gaudi Component 1 – 60% of final grade.	Term 3																
<p><b>Overview/Intent</b></p>	<p>This unit follows on from term 1 &amp; 2. Students will be making their final prototype model for their Gaudi inspired bird box. This will be from woods, plastics and metals where appropriate and use a variety of skills, process and techniques in the workshop. Students will show evidence of trailing and sampling with different techniques, materials &amp; processes and will document all of this in sketchbooks.</p>																		
<p><b>Assessment</b></p>	<p><b>Assessment will be done at the end of the term, providing students with a mark for the whole of the project covering AO1-AO4.</b></p>																		
<p><b>Essential Knowledge (what must students know):</b></p> <ul style="list-style-type: none"> <li>• Safe working practices in the workshop</li> <li>• Know how to skilfully and accurately construct their final prototype using a range of techniques and processes to do so.</li> </ul>	<p><b>Essential Skills (what must students be able to demonstrate):</b></p> <p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>• refine their ideas as work progresses through recording, selecting, editing and presenting outcome(s)             <ul style="list-style-type: none"> <li>• record their ideas, observations, insights and independent judgements,</li> </ul> </li> </ul>	<p><b>Lessons:</b></p> <table border="1"> <tr> <td data-bbox="1084 1027 1379 1059">08 April 2024</td> <td data-bbox="1379 1027 2145 1059">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1075 1379 1107">15 April 2024</td> <td data-bbox="1379 1075 2145 1107">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1123 1379 1155">22 April 2024</td> <td data-bbox="1379 1123 2145 1155">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1171 1379 1203">29 April 2024</td> <td data-bbox="1379 1171 2145 1203">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1219 1379 1251">06 May 2024</td> <td data-bbox="1379 1219 2145 1251">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1267 1379 1299">13 May 2024</td> <td data-bbox="1379 1267 2145 1299">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1315 1379 1347">20 May 2024</td> <td data-bbox="1379 1315 2145 1347">Final Piece making</td> </tr> <tr> <td data-bbox="1084 1362 1379 1394"></td> <td data-bbox="1379 1362 2145 1394"></td> </tr> </table>		08 April 2024	Final Piece making	15 April 2024	Final Piece making	22 April 2024	Final Piece making	29 April 2024	Final Piece making	06 May 2024	Final Piece making	13 May 2024	Final Piece making	20 May 2024	Final Piece making		
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<ul style="list-style-type: none"> <li>Explore the effects of using different media, materials, techniques and processes, and the ways in which they can be used in relation to students own creative intentions.</li> <li>Recall and develop visual literacy when discussing work</li> </ul> <p><b>Terminology:</b> Materials, manufacture, prototype, develop, refine, trials, samples</p>	<p>in ways that are appropriate such as drawing or photographing</p> <ul style="list-style-type: none"> <li>review and evaluate work and extend their vocabulary away from common phrases such as 'unique'.</li> </ul>	03 June 2024	Final Piece making
		10 June 2024	Final Piece making
		17 June 2024	Final Piece making
		24 June 2024	Final Piece making
		01 July 2024	Photos of final project & sketchbook work
		08 July 2024	Evaluations of project
		15 July 2024	DIRT time
		<p><b>Careers Links:</b> Students will look at roles within the design industry and study the work of an existing designer.</p>	
		<p><b>MYPB:</b> Creativity, Evaluation, Innovation, self motivation, active listening, Responsibility</p>	

<b>Product Design: Medium Term Overview</b>			
<b>Year 11</b>	<b>Autumn 1 &amp; 2</b>	<b>Unit Title: Component 1 Coursework Portfolio 60% and ESA 40%</b>	<b>No of Lessons:</b>
<b>Overview/Intent</b>	Three-Dimensional Design is defined here as the design, prototyping and modelling or making of primarily functional and aesthetic consumer products, objects and environments.		
<b>Assessment</b>	<b>Component 1 Coursework Portfolio 60% and ESA worth 40%</b>		
<b>Essential Knowledge (what must students know):</b>	<b>Essential Skills (what must students be able to demonstrate):</b>	<b>Lessons (time frames of lessons are a guide)</b>	
<ul style="list-style-type: none"> <li>Learners are required to know and understand how sources inspire the development of their ideas.</li> <li>Reference should be made to the work and approaches of designers from contemporary and/or historical Contexts.</li> <li>The ways in which meanings, ideas and intentions can be communicated through visual connections, using formal elements, including: colour, line, form, tone and texture</li> <li>Explore the effects of using different media, materials, techniques and processes, and the ways in which they can be used in relation to students own creative intentions.</li> <li>Recall and develop visual literacy when discussing work</li> </ul> <p><b>Terminology:</b></p> <ul style="list-style-type: none"> <li>media</li> <li>materials</li> <li>techniques</li> <li>processes</li> <li>technologies</li> <li>observation</li> </ul>	<p>Students will need to demonstrate the following skills.</p> <ul style="list-style-type: none"> <li>apply an understanding of relevant 3D design practices and develop their ideas through investigations informed by selecting and critically analysing sources</li> <li>refine their ideas as work progresses through recording, selecting, editing and presenting design outcome(s)</li> <li>record their ideas, observations, insights and independent judgements, in ways that are appropriate to the 3D design title such as, drawing or photographing</li> <li>use appropriate specialist vocabulary through either visual communication and written annotation</li> <li>use visual language as appropriate to their own creative intentions through effective exploration of</li> </ul> <ul style="list-style-type: none"> <li><input type="radio"/> media</li> <li><input type="radio"/> materials</li> <li><input type="radio"/> techniques</li> <li><input type="radio"/> processes</li> </ul>	<p>1-36 – Design and development practice piece and coursework final outcome</p> <p>12 weeks – Exam project and exam</p> <p>Week 1 – Exam project selection and mind map                      Week 2-4 – Research, drawing and recording                      Week 5-6 – Designer/artist inspiration                      Week 6-12 – Design ideas and exam preparation</p> <p>10 hours – Examination – final outcome</p>	

<ul style="list-style-type: none"> <li>• present</li> <li>• proportion</li> <li>• accuracy</li> <li>• formal elements</li> </ul>	<ul style="list-style-type: none"> <li>○ technologies</li> <li>• use drawing skills for different needs and purposes, appropriate to the area(s) of study used. Drawing may take the form of mark-making, sketching or linear representations using appropriate media and materials</li> <li>• review and evaluate work and extend their vocabulary away from common phrases such as 'unique'.</li> </ul>	
<p><b>Careers Links:</b> looking at the work of designers in practice.          Product designer,          Surface pattern          Graphic design          Interior design          Illustrator          Web design          Curator</p>	<p><b>Enrichment:</b></p>	<p><b>MYPB</b>          Creativity, innovation, resilience</p>