

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 an iconic British designer to inspire their own creations.			This unit introduces students to Product design practical based skills. It teaches a range of essential making and finishing skills and techniques to help them to engage and explore the subject more fully using both hand and machine tools in the workshop. Students will become designers and work in the style of an iconic British designer to create their own piece of practical work. The practical work will be a lamp based on their chosen iconic British Designer.		
10	Introduction to project themes. Tutorials, project ideas, working in a sketchbook, design styles & designers	Skills workshops making a wooden box, learning about hand and machine tools & finishing	Drawing ideas and development of ideas	3D Model making in traditional materials & using CAD	Final design making	Final design making
11	Producing formal outcomes to project	Producing formal outcomes to project/Final Piece	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			
Year 9	Rotation 1	Unit Title: Best of British	No of Lessons: 4/5
Overview/Intent	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 an iconic British designer to inspire their own creations.		
Assessment	Students will analyse a range of existing products using subject specific key words and their own opinions on if a product is successful. Knowledge quiz of key terminology – product analysis.		
<p><u>Essential Knowledge (what must students know):</u></p> <ul style="list-style-type: none"> • How to complete a successful design theme board • How to create a fact file and be able to discuss the work of a designer • Know they key product analysis key terms and be able to use these to analyse a given product • Be able to use the work of others to influence own work <p>Terminology: Iconic, Product analysis, function, cost, customer, user, function, environment, ergonomics, aesthetics.</p>	<p><u>Essential Skills (what must students be able to demonstrate):</u></p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • Know how analyse a product given a set of subject specific key words • Know the meanings of the key words used to analyse a product • Demonstrate how to create a design theme board • Successfully study the work of an existing British designer and compete a study fact file on them 	<p>Lessons:</p> <ol style="list-style-type: none"> 1. Introduction to the project ‘Best of British’ looking at iconic British designs and start to create a theme board on this 2. Completion of theme board 3. Introduction to British Designers to create a fact file on their chosen designer 4. Assessment: Product analysis - Key terminology quiz. Creation of a product analysis on existing products 5. Design ideas in the style of the designer. 	
<p><u>Careers Links:</u> Students will look at roles within the design industry and study the work of an existing designer.</p>	<p><u>Enrichment:</u> Green power car</p>		<p>MYPB: Creativity, Evaluation, Innovation, self motivation, active listening, Responsibility</p>

Product Design: Medium Term Overview			
Year 9	Rotation 2	Unit Title: Best of British	No of Lessons: 12
Overview	This unit introduces students to Product design practical based skills. It teaches a range of essential making and finishing skills and techniques to help them to engage and explore the subject more fully using both hand and machine tools in the workshop. Students will become designers and work in the style of an iconic British designer to create their own piece of practical work. The practical work will be a lamp based on their chosen iconic British Designer.		
Assessment	Practical based assessment task where students are assessed on their marking out, measuring and cutting skills to construct their lamp design. Written assessment quiz on the names and uses of the hand and machine tools.		
<p>Essential Knowledge (what must students know):</p> <ul style="list-style-type: none"> • How to use others work to influence own • Know how to present ideas and outcomes • To be able to use card model making equipment safely to develop an idea. • To understand how to use hand tools with precision and accuracy to measure, mark out and cut 3D materials • To be fully aware of health & safety in the workshop and know how to work in a way that keeps them and others safe • Be able to apply a finish to their product which is high quality <p>Terminology: hand tools, machine tools, health & safety, tenon saw, try square, steel rule, file, finish, varnish, coping saw, finger joint</p>	<p>Essential Skills (what must students be able to demonstrate):</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • Use hand tools to mark, measure and cut their wood joints with precision and accuracy to create their frame for the lamp. • To be able to work in the workshop safely following the health & safety rules fully • Know the names of the hand tools they have used and know how to use them correctly and safely • 	<p>Lessons:</p> <ol style="list-style-type: none"> 1. 3 x Design ideas for the best of British style lamp based on the work of an iconic British designer as researched in unit 1 rotation 2. Final design planning for the making 3. Model making in card of final design idea 4. Model making in card of final design idea 5. Marking out of the joints for the wood frame of the lamp 6. Marking/cutting out of the joints for the lamp 7. Cutting & gluing of the wood joints for the lamp 8. Gluing & finishing of the frame 9. Completion of the decoration 10. Completion of the decoration 11. Evaluation lesson & assessment 12. Feedback and improvements 	
<p>Careers Links: Students will look at roles within the design industry and study the work of an existing designer. Health & Safety</p>	<p>Enrichment: Green power car</p>	<p>MYPB: Creativity, Evaluation, Innovation, self motivation, active listening, Responsibility</p>	

Product Design: Scheme of Learning

Rotation 1: Introduction to Product Design –Best of British

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 an iconic British designer to inspire their own creations.

Lesson	Objective	Lesson Content	Resources and Scaffolding	Teacher Notes, additional planning etc
1	Introduction to the project ‘Best of British’ looking at iconic British designs and know how to create a design theme board	<ul style="list-style-type: none"> • DINT: iconic British designs • Introduction to the project, show iconic designs and go through what makes a design iconic • Students to use the images and materials provided to create a best of British theme board 	Iconic designs cards Power point for the project Exemplar theme boards & success criteria All students will receive a guide through this stage to support the new learning. Teacher will offer feedback and specific support where needed.	
2	Introduction to the project ‘Best of British’ looking at iconic British designs and know how to create a design theme board	<ul style="list-style-type: none"> • DINT iconic British dishes • Students to use the images and materials provided to create a best of British theme board 	DINT iconic British dishes Power point for the project Exemplar theme boards & success criteria All students will receive a guide through this stage to support the new learning. Teacher will offer feedback and specific support where needed.	

3	To have knowledge an iconic British designer and to be able to select relative information when creating a fact file adding your own opinions on their work.	<ul style="list-style-type: none"> • DINT: product analysis word sort • Students to use the information on the designers to create a fact file. • Show example work and success criteria 	Exemplar designer fact file Information on designers for students to use Card for creating fact file	
4	Assessment: Product analysis - Key terminology quiz. To be able to use the product analysis key words to analyse an existing product.	<ul style="list-style-type: none"> • DINT: product analysis key words sort • Students to use the key words to complete a product analysis on a lamp 	DINT: card sort on key words Images and information on 3 x lamps for students to analyse	
5	To understand how to create design ideas in the style of the designer.	<ul style="list-style-type: none"> • Students to design 3 x ideas for their lamp design using their designer as inspiration 	Exemplar design ideas Drawing template Pencil crayons Fine liners	
6	To understand how to create Design ideas for the best of British style lamp based on the work of an iconic British designer as researched in unit 1 rotation	<ul style="list-style-type: none"> • Students to design 3 x ideas for their lamp design using their designer as inspiration 	Exemplar design ideas Drawing template Pencil crayons Fine liners	
7	Understand how to create an orthographic working drawing of their Final design for the making	<ul style="list-style-type: none"> • Orthographic drawing of their final design idea with the 3 viewpoints with sizes and details included 	Exemplar orthographic drawing Template for those who need scaffolding	
8/9	To be able to safely use model making equipment to Model in card of final design idea	<ul style="list-style-type: none"> • Students to model their final idea in card to size and scale of the final design would be 	Example card model Cutting mats, glue guns, knives, rulers, card	

10	To skilfully use the hand tools to Mark out of the joints for the wood frame of the lamp	<ul style="list-style-type: none"> • Students start to mark out their wood joints on their final design using hand tools and pencil 	Example marked out with measurements on for students to refer to <ul style="list-style-type: none"> • Hand tools • Wood lengths • pencil 	
11	To be able to skilfully use the cutting tools with accuracy to cut & glue the wood joints for the lamp	<ul style="list-style-type: none"> • Students to use the hand tools to cut their wood joints 	Hand tools Glue Machine tools Students practical work	
12	Understand the importance of doing a dry glue run and know how to be able to Gluing & finishing of the frame	<ul style="list-style-type: none"> • Students to complete the cutting and glue their wooden frame, checking for squareness and quality before gluing 	Hand tools, wood glue	
13/14	To be able to use a range of materials skilfully and safely to recreate your design in 3D	<ul style="list-style-type: none"> • Completion of the decoration 	Hand tools, card, plastics, wood for decoration Glue guns, knives, rulers & mats	
15	Understand how to complete a written evaluation on your work and suggest changes and improvements	<ul style="list-style-type: none"> • Evaluation lesson & assessment 	Evaluation templates Assessment form	
16	Understand what you need to improve upon to better your work	<ul style="list-style-type: none"> • Feedback and improvements 	Copies of completed assessment forms	