

Curriculum journey: Design Technology – Year 7



Students rotate between Food Technology and Design Technology completing 3 half-terms on each

The Big Questions:

1. How to use a design brief to support my initial designs?
2. How do I use a design specification to refine my designs?
3. How do I analyse products to influence my design?
4. What are nets and prototypes?
5. How do I successfully create a prototype using a range of textiles materials and equipment?
6. How do I successfully evaluate a prototype?
7. How do I successfully construct a Moroccan lantern?

Moroccan Lantern

Powerful knowledge

Skills

First Half Term

Focus:

How to use a design brief to support my initial designs?
How do I use a design specification to refine my designs?
How do I analyse products to influence my design?

- Students will be learning about basic workshop health and safety.
 - Students will be introduced to the Moroccan lantern brief.
- Students will be learning how to create a product for a client.
Students will learn how to create a mind map to inform their product specification.
- Students will learn about the key term ACCESS FM and how it is used to analyse products.
 - Students will learn about Moroccan patterns and draw patterns inspired by the culture using pencil/ coloured pencils.
 - Students will learn what 'Net' is and how it is used in Design Technology.
- Students will design their product nets using pencil, applying colours and creating colour swatches. ●
Students will learn how to effectively collect feedback [user-centered design], to help refine their final product design.

- Hand-sewing/ embroidery (hand-eye coordination)
- Applying stencils
- Building 3D nets
- Tie Dye
- Designing using geometric shapes
- Designing based on another culture
- Marking out accurately

<p style="text-align: center;">Second Half Term Focus: What is a prototype? How do I successfully create a prototype using a range of textiles materials and equipment?</p> <ul style="list-style-type: none"> ● Students will learn why designers use prototypes in the designing process. ● Students will learn how to create a prototype to show their final product design. ● Students will learn how to use consumer feedback on their prototypes to inform their final product design. ● Students will learn how to do five basic sewing techniques and embroidery. ● Students will learn the step by step tie dye process. <p style="text-align: center;">Third Half Term: Focus: How do I successfully construct a Moroccan lantern? How do I successfully evaluate a prototype?</p> <ul style="list-style-type: none"> ● Students will learn how to apply tie dye. ● Students will learn the properties of decovil and polyester. ● Students will learn how to construct their final design using appropriate materials and equipment. ● Students will learn how to self-evaluate their final product design. 	
<p>Links to KS2</p>	<p>End Points</p>
<p>Students will build on their initial design skills by creating a range of designs and prototypes.</p> <p>Students will build on their knowledge on making a product by using a wider variety of tools and equipment.</p> <p>Students will build on their communication on their ideas through annotated sketches.</p>	<ul style="list-style-type: none"> ● Students will have an annotated design brief. ● Students will have research to inform their ideas through a homework piece. ● Students will have compared products using ACCESSFM in an extended writing task. ● Students have produced two initial product designs using inspiration from the information they have learnt. ● Students will create a final design net and complete an extended writing piece evaluating their design.

- Students produce two 3D paper net prototypes as their final piece.
- Students create two samples of tie dye and show basic sewing skills. ●
- Students transfer the skills they have learnt throughout the project to create a textiles Moroccan lantern.

Curriculum journey: Design Technology - Year 8



Students rotate between Food Technology and Design Technology completing 3 half-terms on each

The Big Question:

- What is the difference between a design brief and a design specification?
- What is ACCESSFM, and why is it used by designers in a project?
- Why do designers generate and analyse initial ideas?
- What are nets and prototypes, and how are they used in the designing process?
- What are nets and prototypes, and how are they used in the designing process?
- What are the different types of joints, and how are they used in Design Technology?
- What are the different tools and equipment used to create a three-dimensional product?
- How do I apply my knowledge of joints, tools, and Health and Safety to produce the final version of my bird box?
- How do I use the design brief and design specification to refine my final product?

Bird Box Project

Powerful knowledge

Skills

Half Term 1

What is the difference between a design brief and a design specification?

What is ACCESSFM, and why is it used by designers in a project?

Why do designers generate and analyse initial ideas?

Students will understand and interpret a design brief.

Students will develop a clear design specification based on project requirements.

Students will use ACCESSFM to analyse and evaluate design needs.

Students will generate and sketch initial design ideas and concepts.

Half Term 2

What are nets and prototypes, and how are they used in the designing process?

What are nets and prototypes, and how are they used in the designing process?

What are the different types of joints, and how are they used in Design Technology?

Students will create and use nets to plan 3D shapes from 2D materials.

Students will build prototypes to test design ideas.

Students will learn and apply different woodworking joints, such as butt joints, lap joints, and finger joints.

Half Term 3

What are the different tools and equipment used to create a three-dimensional product?

How do I apply my knowledge of joints, tools, and Health and Safety to produce the final version of my bird box?

How do I use the design brief and design specification to refine my final product?

Students will follow workshop health and safety protocols.

Students will use a range of DT tools and equipment safely and accurately, including saws, drills, clamps, and sanders.

Students will work with MDF wood, including measuring, marking, cutting, and assembling.

Students will finish and decorate the bird box using techniques that reflect their personal identity and creativity.

Students will evaluate the final product against the design brief and specification.

Students will reflect on their design process and outcomes in relation to their personal identity.

- Understanding and interpreting a design brief.
- Developing a clear design specification based on project requirements.
- Using ACCESSFM (Aesthetics, Cost, Customer, Environment, Safety, Function, Materials) to analyse and evaluate design needs.
- Generating and sketching initial design ideas and concepts.
- Creating and using nets to plan 3D shapes from 2D materials.
- Building prototypes to test design ideas.
- Learning and applying different woodworking joints (e.g., butt joint, lap joint, finger joint).
- Following workshop health and safety protocols.
- Using a range of DT tools and equipment safely and accurately (e.g., saws, drills, clamps, sanders).
- Working with MDF wood, including measuring, marking, cutting, and assembling.
- Finishing and decorating the bird box with techniques that reflect personal identity and creativity.
- Evaluating the final product against the design brief and specification.
- Reflecting on the design process and outcomes related to personal identity.

Links to Year 7	End Points
<p>Students will build on their knowledge of what a design brief and a design specification are.</p> <p>Students will build on creating initial product ideas that connect to the design specification.</p> <p>Students will continue to use external feedback to develop their initial product designs.</p> <p>Students will further their knowledge of choosing the correct equipment to construct a final product.</p>	<ul style="list-style-type: none"> • Ability to interpret and respond to a design brief effectively. • Creation of a detailed and relevant design specification. • Application of ACCESSFM to critically analyse design needs. • Development of original, creative design ideas that reflect personal identity. • Accurate use of nets to visualize and plan 3D structures from 2D materials. • Construction of functional prototypes to test design concepts. • Knowledge of appropriate woodworking joints for strength and aesthetics. • Adherence to workshop health and safety rules throughout the project. • Confident and safe use of various DT tools and equipment. • Manipulation of MDF wood to produce bird box. • Successful assembly of a durable, well-constructed bird box. • Creative decoration and finishing techniques that express individual identity. • Critical evaluation of the final product against the original design brief and specification. • Reflection on the design and making process to identify strengths and areas for improvement.

Curriculum journey:

Graphic Design: Rogue Anthem - Year: 9

Students rotate between Food Technology and Design Technology completing 3 half-terms on each

The Big Questions:	
<ol style="list-style-type: none"> 1. How can we effectively interpret and adapt a design brief to create a cohesive brand identity? 2. How can we utilise design research and software tools to create professional-quality products? 3. How can we effectively research established designers and incorporate design ideas into our work? <ol style="list-style-type: none"> 4. How can we use technology and software to produce digital designs? 5. How do I create a tour poster for a band which is cohesive with its identity? 6. Why is it important for a band's clothing merchandise to match their style and identity, and how does it help fans feel more connected to the band? 7. How can different sewing techniques be used to create a tote bag that reflects the unique identity of a music band? 8. How can I use the design brief and my design ideas to create a successful piece of merchandise that represents a music band's identity and appeals to its fans? 	
Graphic Design: Rogue Anthem Merchandise Project	
Powerful knowledge	Skills
<p><u>Half Term 1</u> How can we effectively interpret and adapt a design brief to create a cohesive brand identity? How can we utilise design research and software tools to create professional-quality products?</p> <p>Students will interpret and respond to a design brief and create a detailed design specification. Students will understand the client, customer, and target audience to tailor their designs effectively. Students will use ACCESSFM to analyse existing merchandise products and inform their design decisions. Students will develop initial logo ideas and refine them into final logo designs suitable for merchandise. Students will generate a variety of initial merchandise design concepts.</p>	<ul style="list-style-type: none"> • Interpreting and responding to a design brief and creating a detailed design specification. • Understanding the client, customer, and target audience to tailor designs appropriately. • Using ACCESSFM to analyse existing merchandise products and inform design decisions. • Developing initial logo ideas and refining them into final logo designs suitable for merchandise. • Generating a variety of initial merchandise design concepts. • Creating nets and prototypes to visualize and test product packaging and merchandise forms.

Half Term 2

How can we effectively research established designers and incorporate design ideas into our work?
How can we use technology and software to produce digital designs?
How do I create a tour poster for a band which is cohesive with its identity?

Students will create nets and prototypes to visualize and test product packaging and merchandise forms.

Students will use digital software and computer-aided design tools to develop and finalize graphic designs.

Students will design a visually impactful tour poster that reflects the band's indie punk rock identity.

Half Term 3

Why is it important for a band's clothing merchandise to match their style and identity, and how does it help fans feel more connected to the band?

How can different sewing techniques be used to create a tote bag that reflects the unique identity of a music band?

How can I use the design brief and my design ideas to create a successful piece of merchandise that represents a music band's identity and appeals to its fans?

Students will apply sewing techniques to create a tote bag as a physical merchandise item.

Students will integrate graphic design elements onto the tote bag to produce a cohesive and branded product line.

Students will combine traditional craft skills with digital design for a multidisciplinary approach.

Students will evaluate their final products against the design brief, specification, and client needs.

Students will reflect on their design process and assess the effectiveness of their branding and product designs.

- Using digital software and computer-aided design tools to develop and finalise graphic designs.
- Designing a visually impactful tour poster that reflects the band's indie punk rock identity.
- Applying sewing techniques to create a tote bag as a physical merchandise item.
- Integrating graphic design elements onto the tote bag to produce a cohesive and branded product line.
- Evaluating final products against the design brief, specification, and client needs.

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Links to Year 7 & 8	End Points
<p>Students will build upon their ability to interpret and respond to a design brief, progressing from personal projects to client-focused briefs.</p> <p>Students will deepen their skill in creating detailed design specifications, moving from self-directed to audience- and client-driven requirements.</p> <p>Students use of ACCESSFM will evolve from basic analysis of materials and function to a more sophisticated evaluation of branding and commercial products.</p> <p>Students will advance from initial personal design ideas to developing and refining logos and merchandise designs for a specific target audience.</p> <p>Reflection skills will develop to include thinking critically about the impact of design choices on brand identity and user engagement.</p>	<ul style="list-style-type: none"> • Respond to a design brief and produce a detailed design specification. • Identify and understand the needs of a client, customer, and target audience in the context of product design. • Effectively apply ACCESSFM to analyse and evaluate existing merchandise products. • Create and refine a logo for use across multiple merchandise items. • Generate creative, original design ideas for a cohesive range of branded merchandise. • Develop and test prototypes using accurate nets for product packaging or promotional items. • Use digital software competently to produce graphic design outcomes. • Design a compelling and visually coherent tour poster that communicates the band's identity and musical style. • Demonstrate sewing skills by constructing a functional tote bag as part of the merchandise range. • Apply printed or digital design elements onto a physical product to produce a well-branded final outcome. • Evaluate the success of final outcomes in meeting the design brief, specification, and audience needs. • Reflect critically on the design and making process to identify strengths and areas for improvements.