

Design Technology

Year 3 and 4

Summer



Topic Ancient Egypt - Textiles
Rationale <p>Teaching sewing in DT through the creation of Ancient Egyptian collars during the summer term provides a hands-on, cross-curricular learning opportunity for Year 3 and 4 students. Sewing develops fine motor skills, hand-eye coordination, and patience, while introducing students to basic textile techniques. The focus on Ancient Egyptian collars ties in with the history curriculum, allowing children to explore the culture, fashion, and craftsmanship of Ancient Egypt.</p> <p>By designing and sewing their own collars, students engage in creative expression while learning practical skills such as threading needles, stitching, and cutting fabric. This project fosters problem-solving as they follow patterns and make decisions on materials, colours, and embellishments. Additionally, it provides a sense of accomplishment and pride in creating something tangible and historical.</p>
NC Objective <ul style="list-style-type: none">• Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups• Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design• Select from and use a wider range of tools and equipment to perform practical tasks for example, cutting, shaping, joining, and finishing, accurately• Select from and use a wider range of materials and components including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities Investigate and analyse a range of existing products.• Investigate and analyse a range of existing products.• Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.• Understand how key events and individuals in design and technology have helped shape the world.• Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.• Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].• Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
Links to other Subject/Topics. <p>History – Ancient Egypt, Art – exploring colour and patterns, maths – measuring</p>
Inspiration for Aspiration <p>Fashion Designer Textile Designer Costume Designer (for film, theatre, or museums) Sewing Machinist</p>
Key Content <p>- Lesson 1: Introduction to Ancient Egyptian Collars Key Content: Overview of Ancient Egyptian culture, clothing, and the significance of decorative collars. Examine images of Egyptian collars and discuss their designs, patterns, and materials. Introduction to the project: designing and sewing a replica collar. Skills: Historical understanding, analyzing patterns, developing design ideas.</p> <p>Lesson 2: Designing the Collar Key Content: Explore geometric patterns, symmetry, and colors used in Egyptian art. Students sketch and plan their own collar designs, considering materials and decorations. Introduction to the design process and how to follow a pattern. Skills: Design planning, creativity, understanding symmetry and pattern.</p>

Lesson 3: Materials and Fabric Preparation

Key Content:

Introduction to different fabrics and materials that will be used for the collars (e.g., felt, cotton).

Demonstration on how to measure and cut fabric accurately based on the design.

Begin cutting fabric for each student's collar.

Skills: Measuring, cutting fabric, understanding material properties.

Lesson 4: Introduction to Basic Sewing Stitches

Key Content:

Teach basic hand-sewing stitches (e.g., running stitch, backstitch) with practice on scrap fabric.

Discuss safety with needles and thread.

Begin stitching pieces of the collar together following their designs.

Skills: Basic sewing techniques, fine motor skills, safety with sewing tools.

Lesson 5: Decorating and Embellishing the Collar

Key Content:

Discuss Ancient Egyptian jewelry and embellishments (e.g., beads, gold, gems).

Demonstration on how to add decorative elements (e.g., stitching patterns, attaching beads).

Students begin decorating their collars based on their designs.

Skills: Embellishment techniques, attention to detail, creativity in decoration.

Lesson 6: Finishing and Evaluation

Key Content:

Students complete any unfinished stitching and add final decorations to their collars.

Discussion on evaluating their work: what went well and what they would improve.

Class presentation where students showcase their collars and explain their design choices.

Skills: Evaluation, presentation skills, reflection on the design process.

Concepts

Design Technology	1	2	3	4	5	6
Design, Make, Evaluate						
Structures						
Mechanisms						
Electrical						
Textiles						
Food and Nutrition						

Skills and Knowledge Year 3

Design

- Begin to research others' needs
- Describe purpose of product
- Follow a given design criteria
- Create a plan which shows order, equipment and tools
- Describe design using an accurately labelled sketch and words
- Explain how product will work
- Make a prototype
- Begin to use ICT to show design

Make

- Select suitable tools/equipment, explain choices; begin to use accurately
- Select appropriate materials, fit for purpose.
- Work through plan in order
- Begin to measure, mark out, cut, and shape materials/ components with some accuracy
- Begin to assemble, join, and combine materials and components with some

Skills and Knowledge Year 4

Design

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- Make a prototype
- Begin to use ICT to show design

Make

- Select suitable tools/equipment, explain choices; begin to use accurately
- Select appropriate materials, fit for purpose.
- Work through plan in order
- Begin to measure, mark out, cut, and shape materials/ components with some accuracy
- Begin to assemble, join, and combine materials and components with some accuracy and apply some finishing techniques

Evaluate

- Look at design criteria while designing and making and use it to evaluate finished product

<p>accuracy and apply some finishing techniques</p> <p>Evaluate</p> <ul style="list-style-type: none"> • Look at design criteria while designing and making and use it to evaluate finished product • Begin to evaluate existing products, considering how well they have been made, materials, whether they work, how they have been made, fit for purpose • Learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products <p>• Technical Knowledge</p> <p>Textiles</p> <ul style="list-style-type: none"> • Join different textiles in different ways Tying knots, sewing, stitch, seam 	<ul style="list-style-type: none"> • Begin to evaluate existing products, considering how well they have been made, materials, whether they work, how they have been made, fit for purpose • Learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products <p>• Technical Knowledge</p> <p>Textiles</p> <ul style="list-style-type: none"> • Join different textiles in different ways Tying knots, sewing, stitch, seam
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<p>Topic Specific Vocabulary DT Year 3</p> <ul style="list-style-type: none"> • Ancient Egypt • Collar • Design • Pattern • Fabric • Material • Textile • Thread • Needle • Stitch • Running stitch • Backstitch • Embellishment • Beads • Decoration • Measure • Cutting • Sewing • Safety • Craftsmanship 	<p>Design Technology Y3/4 DT Vocabulary</p> <p>Textiles</p> <ul style="list-style-type: none"> • Design • Make • Evaluate • Technique • Templates • Sewing • Seam allowance • Annotated sketch • Prototype • Back stich • Running stitch • Tacking • Hessian • Cross stitch • Loom • Pinking Shears 	<p>Topic Specific Vocabulary Y4 DT Vocabulary</p> <ul style="list-style-type: none"> • Ancient Egypt • Collar • Design • Pattern • Fabric • Material • Textile • Thread • Needle • Stitch • Running stitch • Backstitch • Embellishment • Beads • Decoration • Measure • Cutting • Sewing • Safety • Craftsmanship
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By the end of the topic children will know: -

The significance of collars in Ancient Egyptian culture and how they were designed and worn.
 How to create and plan a design, incorporating patterns, symmetry, and colour inspired by Ancient Egyptian art.
 Basic hand-sewing skills, such as using a needle and thread, and different stitches like running stitch and backstitch.
 Knowledge of different fabrics, how to measure and cut them accurately, and how to handle materials safely.
 How to decorate their collars with embellishments like beads and stitching to enhance the design.
 How to collaborate with classmates, present their work, and explain their design process.
 How to reflect on and evaluate their work, identifying strengths and areas for improvement.

Assessment

Fact file of design/designer or invention/inventor, in book.
 Design, in book.
 Observation of use of skills taught in finished product.
 Observation assessment of finished product – is it fit for purpose?
 Evaluation of finished product, in book.