



## Manor Primary School

### Subject: Design & Technology – Textiles- Designing and making a bag

Autumn Term: Year 4

#### Overview of the Learning:

In this unit children will design and make a travel bag (football boots bag/ carry bag etc.) children learn how products *e.g. bags* are designed for different purposes and people. They learn that designers must address a range of needs when designing bags *e.g. appearance, safety, comfort, practicality and size*. Children learn about making accurate patterns/templates and detailed working drawings. They will understand the role of prototypes and how they are used to refine their design. They develop making and finishing skills to enhance the quality of their bags including the use of a sewing machine and hand sewing techniques to add embellishments and fastenings. They learn to evaluate their products critically against design criteria and identify what to do to improve them.

#### Core Aims

- Develop an understanding of how research can be used to create a design specification to ensure products are functional, appealing and are fit for purpose, aimed at particular individuals or groups.
- Develop an understanding of how to use a wide range of tools including sewing machines to join pieces of material accurately.
- Develop an understanding of how to select from and use a wider range of textile materials according to their functional properties and aesthetic qualities.
- Develop an understanding of how to strengthen, stiffen and reinforce their products using their knowledge of textiles and structures.
- Develop an understanding of how textile products are launched and advertised.
- Develop an understanding of the skills of evaluation when investigating and analysing a range of existing products as well as their own.
- To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

#### Key Concept:

- Textiles

#### Second Order Concept:

- Responsibility
- Significance

#### Children should be taught:

##### Substantive Knowledge:

- What is a bag?
- What are the basic parts (components) of a bag?
- What are the purposes of the basic components of a bag?
- What is the difference between functional and decorative bags?
- What is market research?
- What is a target audience?
- What is a prototype?
- What is a pattern/template?
- What is a seam allowance?
- What is advertising and marketing?
- What is the purpose of evaluating?

##### Procedural Knowledge:

- How do businesses use market research
- How are different fastenings used in bags
- How do different materials effect the practicability and suitability of a bag
- How are bags (textiles) designed
- How are patterns drawn and annotated
- How are fabrics joined together using a sewing machine
- How are fabrics embellished
- How are embellishments attached
- How are textiles advertised and launched
- How do we evaluate a product



- 🌸 Similarity and difference
- 🌸 Written and Oral Expression

### Prior Learning:

#### EYFS -

- 🌸 Select tools and techniques needed to shape, assemble and join materials.
- 🌸 Discuss work as it progresses.
- 🌸 Discuss how closely finished products meet design criteria.
- 🌸 Begin to use scissors to cut straight and curved edges.
- 🌸 Use technical vocabulary when appropriate.

#### Year 1 -Textile: Design and make a Christmas stocking.

- 🌸 Safely and securely join textiles with hand sewing techniques using a needle and thread.
- 🌸 Apply decorative techniques.
- 🌸 Evaluate against design criteria.

#### Year 2- Textile: Design and make an African purse/wallet/pencil case.

- 🌸 Test and identify the suitability of textile materials ensuring they are fit for purpose.
- 🌸 Investigate ways of joining materials and strengthening their product.
- 🌸 Create a design specification for a pencil case/money container using the market research and enquiry about Kenyan designs .
- 🌸 Attach fastenings to the product using hand sewing techniques.
- 🌸 Create and evaluate a purse/wallet, money belt/ pencil case container against the specification and the needs of the target audience.

### End Point:

- 🌸 Make quality textile products to meet the requirements of a design specification.
- 🌸 Select materials for a purpose according to their functional properties and aesthetic qualities.
- 🌸 Know how templates and prototypes are used in product design.
- 🌸 Understand how textile products are launched and advertised.
- 🌸 Evaluate product identify future improvements and the impact.

### Future Learning

- 🌸 How do we use evaluations to inform and revise a product

### Designing and developing ideas

- 🌸 Observe and explore and generate ideas, define problems and pose questions in order to develop investigations and products.
- 🌸 Take ownership of the whole design process: carrying out market research, designing, creating a prototype, making improvements, creating an end product and evaluating.
- 🌸 To identify the needs of the end user by exploring the existing market and asking questions about what bags are popular and why and where there are gaps in the market which could generate a profit.
- 🌸 Children will become familiar with how to create a design specification with the needs of the end user in mind taking into consideration the results of their market research. Communicate and model in order to explain and develop ideas, share findings and conclusions.

### Making Quality Products

- 🌸 Apply practical skills to design, make and improve textile products safely, taking account of users and purposes.
- 🌸 To create a prototype of a bag identifying how the pattern fits together and understand the importance of this in the design process.
- 🌸 To use a sewing machine safely in order to create a high quality finished product.
- 🌸 To understand how fastenings such as buttons, zips and press studs are attached for functional purposes.

### Evaluate Products and Processes

- 🌸 To continually make systematic evaluations when designing and making, to bring about improvements in processes and outcomes.
- 🌸 Evaluate the end product against the design specification and the needs of the end user.
- 🌸 Identify successes and suggest improvements during and after the design and making process.

### Technical Knowledge

- 🌸 Develop a range of hand and machine sewing techniques.



Textiles- Designing and Making a tablet/IPad case (CAD)- Year 5

**Outcomes**

- Examine a range of existing bag products and identify the purpose, suitability appearance and function and how the bags have been assembled.
- Carry out market research including questionnaires to find out about the products that are available to buy, gaps in the market and the needs of the end user.
- Identify the suitability of materials ensuring they are fit for purpose.
- Create a design specification for their own bag using the market research.
- To create a pattern and prototype using their design specification.
- To use a sewing machine to create a bag of their own design joining the seams neatly to create a high quality finished product.
- To use attach fastenings to the bag.
- To advertise their product.
- To evaluate the bag against the design specification and the needs of the end user.
- Suggest improvements during and after the design and making process.

**Cross Curricular links:**









- Art & Design:** Mosaic Patterns
- P.E:** Swimming- exercise bag
- Maths:** Measuring textiles accurately

**Building Cultural Capital**

Children will explore a range of fabrics and textiles. They will design and make their own designer bag (bag for specific purpose, PE Kit/ Football Boots bag/ handbag etc.) They will make their own pattern, make their own bag and evaluate it. Exploring product launching and advertising in textiles.

Learning Objectives	Suggested Learning Opportunities	Vocabulary	Resources and hooks for learning.
<p>To investigate a range of existing textile products</p> <p>To explore how the properties of a material match a purpose.</p> <p>To identify the different aspects of textile product design.</p>	<p><b>Substantive Knowledge:</b></p> <p>What is a bag?</p> <p>What are the basic parts (components) of a bag?</p> <p>What are the purposes of the basic components of a bag?</p> <p>What is the difference between functional and decorative bags?</p> <p><b>Procedural Knowledge:</b></p> <p>How are different fastenings used in bags?</p> <p>How do different materials effect the practicability and suitability of a bag?</p> <p> Explore a range of bags (PE Bags/ shopping bag/ football boots bag). Identify the purpose of each bag and the intended audience.</p>	<p><b>Fabric</b>-cloth or other material produced by weaving or knitting fibres names of fabrics</p> <p><b>Fastening</b> - In textile design, fastenings are the objects used to hold a garment together. While they can be permanent, they are generally built to fasten and unfasten the textile numerous times</p> <p>compartment</p>	<p>Range of bags; PE bags, Football boot bags, travel bags</p> <p>Selection of fabrics and fastenings</p>



<p>To know that products are designed for a particular purpose and are suitable for different users.</p>	<p> Focus exploration upon:</p> <ol style="list-style-type: none"> <li>1. Component parts of a bag- handle, main body, opening, fastenings, pockets.</li> <li>2. The different types of fabrics used and how the material suits the purpose e.g. a stiff material, waterproof, flexible, wear, strength, comfort etc.</li> <li>3. Attachments – how the fabric is joined at the seams, how the handles are joined link back to prior learning on sewing.</li> <li>4. Fastenings – pull strings, buttons, zips, and press studs.</li> <li>5. Appearance – How is the bag appealing to the intended audience?</li> </ol> <p>Embellishments – sequins, transfer, fabric pens, sewn details.</p> <p> Discuss the suitability of the bags for different users and their different purposes. Distinguish between bags that are functional and those that are purely decorative.</p> <p> Identify the key aspects that a designer needs to consider when designing products – appearance, function, cost and safety when designing products;</p> <p> Use sketching/ annotated diagrams from different orientations to show important points in a specification that the designer might have worked to.</p>	<p>Zip Button</p> <p><b>Embellishments</b> –Textile embellishment refers to the process of adding color, pattern, texture or design to fabric through the use of outside mediums such as thread, ribbon, sequins, yarns, buttons, buttonholes and more.</p> <p>Sequins Transfer</p>	
<p>To investigate a range of existing textile products.</p> <p>To collect information in order to create a design specification.</p> <p>To investigate the needs of the end user.</p>	<p><b>Substantive Knowledge:</b> What is market research? What is a target audience?</p> <p><b>Procedural Knowledge:</b> How do businesses use market research?</p> <p> <b>Sticky Knowledge</b> – What are the basic parts (components) of a bag? What are the purposes of the basic components of a bag? How do different materials effect the practicability and suitability of a bag?</p> <p> <b>Provide context for unit-</b> Children have been asked to design a bag for the Next spring collection.</p> <p> Explain market research must be carried out in order to identify gaps in the market and to find out what will sell well.</p> <p> Discuss the use of questionnaires, visiting shops, looking through magazines to see what is available on the market, what is popular and where there are gaps.</p>	<p><b>Market research</b> –the action or activity of gathering information about consumers' needs and preferences.</p> <p><b>Target Audience-</b> A Target audience is a group of consumers which can be identified as purchasers of a company's product or service.</p>	<p>Range of PE bags, Football boot bags, travel bags Selection of fabrics and fastenings</p> <p>Examples of market research questionnaire using open and closed questions.</p>

Carry out market research in the style of the apprentice. Develop children's use of open and closed questions to gain relevant information from their surveys.

To learn how to pin, sew and stitch materials together to create a product.

To learn how to embellish a product.

To learn how to attach fastenings.

**Substantive Knowledge:**

What is a seam allowance?

**Procedural Knowledge:**

How are fabrics joined together using a sewing machine?

How are fabrics embellished?

How are embellishments attached?

- Sticky Knowledge** – What are the purposes of the basic components of a bag? How do different materials effect the practicability and suitability of a bag?
- Deconstruct a bag with children, examining how the seams are sewn, how handles are attached, different sewing techniques used and how any embellishments have been attached.
- Explain how when designing a seam allowance needs to be accounted for of 1–1.5cm to enable the material to be joined.
- Create a textile skill board showcasing the following skills;
- How to pin fabric allowing minimal wastage e.g. by nesting, lay planning.
- Sewing embellishments – running stitch, blanket stitch, back stitch, cross stitch.
- Sewing material using the sewing machine. Demonstrate how to stitch right sides together, to snip curved edges, to tack wadding to fabric (use of an eyelet punch should be shown if bags are to be laced together).
- Consider different techniques for adding colour, pattern and texture to the fabric e.g. embroidery, simple appliqué, use of sequins, use of fabric paints.
- Explore a variety of fastenings work e.g. zips, press studs, drawstrings, buckles, buttons etc.



Seam

**Seam allowance-** Seam allowance (sometimes called inlays) is the area between the fabric edge and the stitching line on two (or more) pieces of material being sewn together

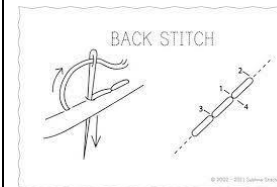
**Embellishment-** Textile embellishment refers to the process of adding color, pattern, texture or design to fabric through the use of outside mediums such as thread, ribbon, sequins, yarns, buttons, buttonholes and more.

**Stitching techniques-**

**Running stitch-**



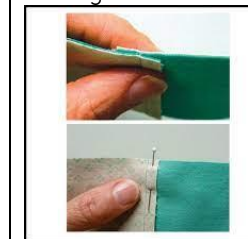
**Back stitch-**



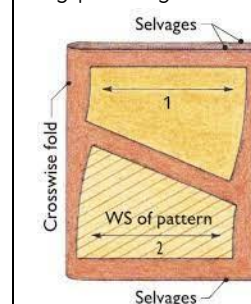
**Blanket stitch-**

- Range of fabrics
- Board for skill board
- Sewing Machine
- Thread, scissors, pins, measuring tape, needles
- Range of fastenings- zips, buttons, press studs, drawstrings.
- Range of embellishments – fabric paint, sequins,

Pinning techniques-  
Nesting-



Lay planning-





Pinning techniques-  
Nesting  
Lay planning

Fastenings-  
Zip  
Press stud  
Drawstring  
Button

To understand that pattern/templates can be used many times and this ensures consistency in size.

To develop a design specification.

To understand that ideas for products can be developed by editing a prototype.

**Substantive Knowledge:**

What is a prototype?  
What is a pattern/template?

**Procedural Knowledge:**

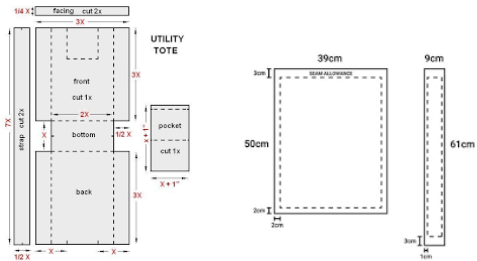
How are bags (textiles) designed?  
How are patterns drawn and annotated?

- 🌈 **Sticky Knowledge** – What are the purposes of the basic components of a bag?  
How do different materials effect the practicability and suitability of a bag?
- 🌈 Children to design their bag thinking about the intended audience. Children to consider the use of fabrics, embellishments, fastenings and handles.
- 🌈 Show children a pattern/ template for a bag discuss the dimensions (emphasise the importance of size and how this many change if measurements and cutting isn't accurate) consider the economical use of fabric. Reinforce the need for seam allowance.
- 🌈 Children to design their bag and create a template using squared paper.

**Prototype-** Textile prototyping is the process of bringing a concept or idea for any sewing or fabric-based need to life so that an end product can be brought to market.

**Pattern-** First, patterns, or garment patterns, can be a template from which parts of a garment are traced onto fabric before cutting and assembling  
Annotated sketch  
Design

Fabric  
Squared paper  
Example of templates  
Sewing Machine  
Thread  
Scissors  
Pins  
Measuring tape  
Needles



Reversible Tote Bag Pattern

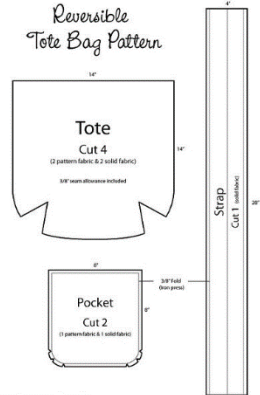
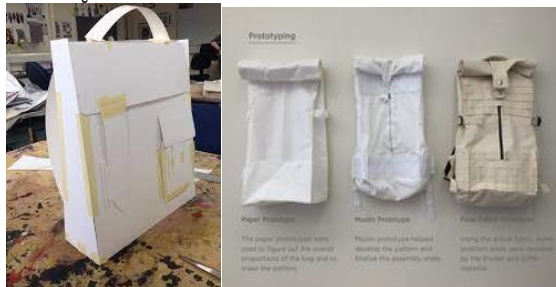




Photo by Pinterest. Created by Tipton Design.

- Children to create a prototype of the bag thinking about the size and shape of the bag and the dimensions needed. Discuss the purpose of a prototype and how it can be used to refine design ideas.
- Children to create their prototype using paper or inexpensive materials. Children to evaluate their prototype and discuss any potential changes that are required.



- Children to write a step-by-step plan or draw a flow chart to demonstrate the order in which they will proceed based on their findings from their prototype.

	<ul style="list-style-type: none"> <li>Check that the children's final idea and construction is realistic before they begin.</li> <li>Class management -A key aspect of this unit is for children to be able to design and use their own pattern/template. Some children may experience difficulty in designing their own patterns/template and will therefore need support. Have a prepared pattern of a bag for children who have difficulty making their own. Children could use inexpensive and easily worked material. Cut fabric to manageable sizes for the children to use.</li> </ul>		
<p>To sew a bag using permanent joining techniques.</p> <p>To follow a pattern to create a bag.</p> <p>To understand how to achieve a quality product.</p>	<p><b>Substantive Knowledge:</b>          What is a seam allowance?          What is a pattern/template?</p> <p><b>Procedural Knowledge:</b>          How are fabrics joined together using a sewing machine?          How are fabrics embellished?          How are embellishments attached?</p> <ul style="list-style-type: none"> <li><b>Sticky Knowledge</b> – What is a seam allowance?              What is a pattern/template?</li> <li><b>Prior Knowledge-</b> Children have used hand sewing techniques such as back stitch, running stitch and blanket stitch.</li> </ul>  <ul style="list-style-type: none"> <li>Re-model and demonstrate how to use a sewing machine to join materials, ensuring the seams are neat in order to produce a high quality end product. Model and demonstrate how fastenings can be attached.</li> <li>Children to create their bags by cutting the required pieces and assembling using a sewing machine.</li> <li>Children to use hand stitching to add any additional decoration to their bags.</li> <li>Remind children to evaluate their product as they are constructing it and make appropriate changes accordingly giving reasons.</li> </ul> <p><b>Health and safety</b>          When carrying out a risk assessment for this activity, teachers will need to consider the materials, tools and equipment being used. In addition, the following points should be noted:</p>	<p>Seam  <b>Seam allowance-</b> Seam allowance (sometimes called inlays) is the area between the fabric edge and the stitching line on two (or more) pieces of material being sewn together  <b>Embellishment-</b> Textile embellishment refers to the process of adding color, pattern, texture or design to fabric through the use of outside mediums such as thread, ribbon, sequins, yarns, buttons, buttonholes and more.</p> <p><b>Stitching techniques-</b>  <b>Running stitch-</b></p>  <p><b>Back stitch-</b></p>	<p>Range of fabrics          Sewing Machine          Thread, scissors, pins, measuring tape, needles          Range of fastenings- zips, buttons, press studs, drawstrings.          Range of embellishments – fabric paint, sequins,</p>



- children using sewing machines should be supervised.

BACK STITCH

Blanket stitch-

Pinning techniques-  
Nesting  
Lay planning

Fastenings-  
Zip  
Press stud  
Drawstring  
Button

To know how textile products are advertised.

To understand the importance of product launching.

**Substantive Knowledge:**  
What is advertising and marketing?

**Procedural Knowledge:**  
How are textiles advertised and launched?






- Prior Knowledge** – Children have explored packaging.
- Discuss with children how textiles are launched. Introduce the concept of catwalks and product launching/advertising via a range of media – TV, social media, billboards, catalogues etc. Discuss the reasons behind advertising and what makes an effective advert. E.g. to raise awareness, increase profits, celebrity endorsement.
- Explore existing advertising for bags.
- Children to take part in a Next Spring Collection Launch catwalk to launch their designer bag onto the market.
- In addition children could create a short video advert or poster to launch their product.

Advertise  
Catwalk  
Product Launch

Dior

A range of current bag advertisement, <https://www.vogue.com/fashion-shows/fall-2022-ready-to-wear/bottega-veneta> Explore a range of current catwalk shows.



<p>To evaluate the finished design against the specification.</p> <p>To carry out a questionnaire to gather the opinions of potential end users.</p> <p>To identify areas for development</p>	<p><b>Substantive Knowledge:</b> What is the purpose of evaluating?</p> <p><b>Procedural Knowledge:</b> How do we evaluate a product? How do we use evaluations to inform and revise a product?</p> <ul style="list-style-type: none"><li> <b>Sticky Knowledge</b> – What are the purposes of the basic components of a bag? How do different materials effect the practicability and suitability of a bag?</li><li> <b>Prior Knowledge</b> – Children have developed skills in identifying strengths and areas for improvements in their products.</li><li> Children to design a questionnaire to gather the opinions of the potential end users. What do they like about the bag? Would they buy this bag? What would they change(if anything)? Children to use a range of open and closed questions to seek opinion.</li><li> Children to take into consideration their original design specification and the end users opinions and evaluate their product explaining what changes they have made along the way and why, what went well and what they could do to further develop the bag.</li><li> Children to reflect on the skills develop across this unit linking back to their prior textile learning and considering how the sewing skills learnt could be applied elsewhere.</li></ul>	<p>Evaluation</p> <p>User</p> <p>Purpose</p> <p>Success</p> <p>Improvement</p> <p>Impact</p> <p>Preference</p>	
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