

## Design and Technology – Year 2

### Content- Textiles- Templates and joining techniques

#### Big Question: Why are the user's needs important when designing a product?

NC objectives - areas of study	End point of area of study	Vocabulary		
		Basic	Adventurous	Technical
<p>Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts.</p> <p>When designing and making, pupils should be taught to:</p> <ul style="list-style-type: none"> <li>-Design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>-Generate, develop, model and communicate their ideas through talking, drawing, templates, mock ups and, where appropriate information and communication technology.</li> <li>-Select from and use a range of tools and equipment to perform practical tasks.</li> <li>-Select from and use a wide range of materials and components including construction materials, textiles according to their characteristics.</li> <li>-Explore and evaluate a range of existing products.</li> <li>-Evaluate their ideas and products against design criteria.</li> </ul>	<p><b>Textiles</b></p> <p>Children have explored and evaluated existing textile products.</p> <p>The children can talk about the purpose of existing products and who the intended users are.</p> <p>Children have compared existing products and their finishing techniques, materials, fabrics, joining techniques and fastening.</p> <p>In a guided group, children can thread a needle, use running stitch and a range of joining techniques. These include stapling, lacing, gluing, sticking and pinning.</p> <p>Children can discuss the advantage and disadvantages of using each joining technique.</p> <p>Children have explored and used different finishing techniques- using painting, fabric crayons, stitching, sequins, buttons and ribbons.</p> <p>Children understand that 3D textile products are made using templates that are identical.</p> <p>Children design, make and cut out a template.</p> <p>When describing products or evaluating their own, children understand and use the correct technical vocabulary.</p>	<p>Join, material, needle, pattern, pins, staple, glue,</p>	<p>Finish, sew, decorate, pinning, stitch, template, features, suitable, quality.</p>	<p>Mark out, running stitch, mock up, lacing, variety of textiles (dipryl, felt, reclaimed fabric).</p>

## Knowledge

### Substantive Knowledge

Textiles- concepts- **User**

#### Lesson 1:

**LO: To know a range of existing textiles and the appropriate user.**

**Vocabulary-textiles, joins, suitable, fabric**

(Retrieval opportunities from year 1 Science- Children to use knowledge of materials and whether material types are appropriate for the existing products and why e.g. characteristics of materials and whether they are waterproof.)

Children to explore a range of existing textiles (bag products) for a range of users. Children to know the users for each product and discuss the materials and finishing techniques that have been used. How does this influence the user? (Link to concept `user` and reflect on previous units with the same concept in year 1. Children to identify each part of the products and identify characteristics making links to users needs, likes and interests.

#### **Example questions:**

How many parts is it made from? What is it joined with? Why do you think these joining techniques have been chosen? Who is the intended user? How is it fastened?

#### Lesson 2:

**LO: To understand how simple 3D products are made using a template to create two identical shapes.**

**LO: To know how to join fabrics using different techniques.**

**Vocabulary- template, mark out, pattern**

Children to be given the opportunity to investigate different materials and know that 3D objects are made from a template using two identical shapes. Using prepared teaching areas, demonstrate the use of a template using simple paper patterns. Children to make their own simple templates using 2 pieces of fabric and then practice the following joining techniques- running stitch, taping, gluing, pinning and stapling. From this, children will know the

### Disciplinary Knowledge

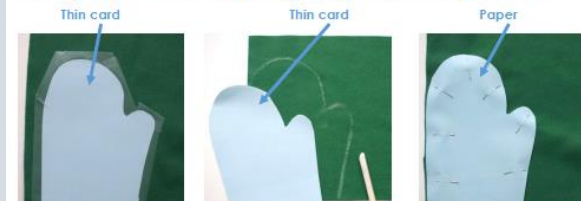
**Each lesson: Tell chn-** Today we are going to be a fashion designers/seamstress'/tailors. Explain to the children that a fashion designer's role is to research up and coming trends and choose themes for users and collection of items. When designing products, children will have the opportunity to explore a range of materials, fabrics colours and designs to meet the users needs/likes/interests whilst being functional. When making products, children will then have the opportunity to work like a seamstress/tailors. Explain to the children that this will involve marking out, measuring and cutting materials accurately. They will use sewing equipment/machines to create a working product but also alter or repair based on the users needs.

Throughout the unit, children will draw upon other subject disciplines such as Mathematics and Science. They will also continue to develop physical fine motor skills and eye co-ordination when using tools and the running stitch. Children will mark out, measure, cut and discuss whether materials are appropriate for their product- e.g. waterproof, thin, strong, flexible etc.

Children to follow the four aspects of Design and Technology- research, design, make and evaluate whilst building upon technical knowledge to make their finished product.

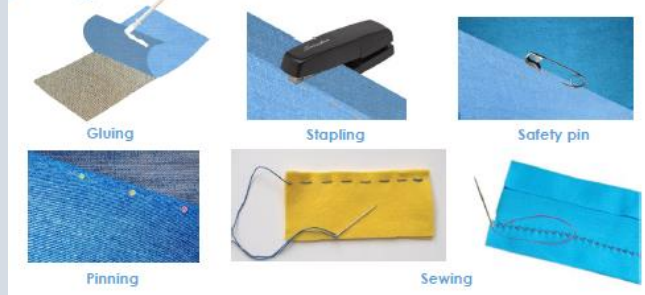
types of joining techniques they would like to use on their product and explain their reasons- linking to the concept `user`.

### Three alternative ways of using templates and simple pattern pieces



### Exploring and evaluating joining techniques

#### Joining fabric



### Lesson 3:

**LO: To know how to design a product for an intended user.**

### **Vocabulary-Design, decorate, features**

Children to generate a range of ideas for their product linked to their intended user. E.g. what will the product need to have? What will the product be made from? What size will it be? Through talk, drawings and mock ups, ask children to develop and communicate their ideas. ICT could be used to support with symmetry or patterns for children working above expected standard. Encourage children to draw their product and label using correct technical vocabulary and then choose one idea.

### Lesson 4:

**LO: To know how to mark out, cut and join material when creating their product.**

### **Vocabulary-mark out, stitch, sew, joining techniques (glue, staple, pin)**

Children to be given the opportunity to create their product using their knowledge from previous sessions of marking out, cutting the template and using their chosen joining technique. Children to select and use the appropriate tools and equipment to perform practical tasks. Tables to be set up so children can independently access resources. Encourage children to reflect on their chosen design- have you had to adapt design or making process and why is this?

### Lesson 5:

**LO: To know different finishing techniques and understand how this can influence a user.**

#### **Vocabulary-decorate, finish, suitable**

Children to complete their textile product and choose the finishing techniques to be included. Children to draw upon previous knowledge of how these can influence their user and why. E.g. colours, patterns, fabric etc. Ensure children look back on their designs throughout the process and reflect or begin to adapt where necessary.

### **Finishing techniques**



### Lesson 6:

**LO: To know how to evaluate finished product and how it has met the user's needs.**

#### **Vocabulary- recap vocabulary from the whole unit**

Children to evaluate and reflect on first design and finished product. Children to understand how the finished product has met the intended user's need and did it meet the purpose.	
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<b>Concepts</b>	
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<b>User</b>	<b>Purpose</b>
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<b>ASSESSMENT</b>	
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<b>KNOW MORE, REMEMBER MORE, DO MORE...</b>	
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In this unit of learning, progress has been made when a learner knows more. This 'distance travelled' from the starting point is evidenced through them remembering more and doing more: in books, low stakes quizzes, retrieval, use of mind maps, answering the big question and being able to feel more confident about this unit.	
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