


Learning journey	Design Technology	Textiles – making a soft toy	Year 3 – Autumn 1	
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Building on prior learning	Theme overview	Preparing for future learning	Vocabulary	
<p>In KS1, children will learn to:</p> <p><b>Design:</b></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> </ul> <p><b>Making:</b></p> <ul style="list-style-type: none"> <li>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p><b>Evaluating:</b></p> <ul style="list-style-type: none"> <li>explore and evaluate a range of existing products</li> <li>evaluate their ideas and products against design criteria</li> </ul> <p><b>Technical skills:</b></p> <ul style="list-style-type: none"> <li>build structures, exploring</li> <li>how they can be made stronger, stiffer and more stable</li> </ul>	<p><b>The pupils will know:</b> How different fabrics are used to create a product, depending on their properties.</p> <p><b>The pupils will study:</b> The potential use of materials and fabrics.</p> <p><b>They will learn:</b> Ways to join fabrics and materials in order to create a secure join.</p> <p><b>They will investigate:</b> Different products which are already on the market and use this research to design their own product.</p>	<p>In Year 5, children will learn to:</p> <p><b>Design:</b></p> <ul style="list-style-type: none"> <li>Generate innovative ideas by carrying out research including surveys, interviews and questionnaires.</li> <li>Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design.</li> <li>Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.</li> </ul> <p><b>Making:</b></p> <ul style="list-style-type: none"> <li>Produce detailed lists of equipment and fabrics relevant to their tasks.</li> <li>Formulate step-by-step plans and, if appropriate, allocate tasks within a team.</li> <li>Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.</li> </ul> <p><b>Evaluating:</b></p> <ul style="list-style-type: none"> <li>Investigate and analyse textile products linked to their final product.</li> <li>Compare the final product to the original design specification.</li> <li>Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.</li> <li>Consider the views of others to improve their work.</li> </ul> <p><b>Technical skills:</b></p> <ul style="list-style-type: none"> <li>A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.</li> <li>Fabrics can be strengthened, stiffened and reinforced where appropriate.</li> </ul>	<p>Key vocabulary that the children will be taught / use during the unit:</p> <p>fabric names of fabrics compartment button structure finishing technique strength weakness stiffening templates stitch seam user purpose design model evaluate annotated sketch functional innovative label drawing aesthetics function</p>	

# NC coverage and HWJS skills development

## National curriculum coverage for Design and Technology

### Key stage 2

#### Design

use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular 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

#### Make

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

#### Evaluate

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

#### Technical knowledge

apply their understanding of how to strengthen, stiffen and reinforce more complex structures

## HWJS skills development

#### Design:

- Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.

- Produce annotated sketches, prototypes, final product sketches and pattern pieces.

#### Making:

- Plan the main stages of making.

- Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing.

- Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern.

#### Evaluating:

- Investigate a range of 3-D textile products relevant to the project.

- Test their product against the original design criteria and with the intended user.

# Knowledge organisers

This contains the key knowledge that the children will be taught during the unit of work – this should match up with the knowledge organiser overview

1. Year Groups  
**Years 3/4**

2. Aspect of D&T  
**Textiles**  
Focus  
**2-D shape to 3-D product**

4. What could children design, make and evaluate?  
purse/wallet soft toy/mascot apron  
fashion accessory beach bag shoe bag  
pen/cil case story sack other – specify

5. Intended users  
themselves friends family teachers  
children parents other adults  
other – specify

6. Purpose of products  
entertainment hobbies protection  
celebration pleasure carrying things  
other – specify

16. Possible resources  
collection of textile products linked to the chosen product to be made  
selection of fabrics and fastenings  
left/right handed scissors, needles, thread, tape, fabric glue, pins, measuring tape  
items to use for finishing e.g. fabric paints, paints for printing, thin paint brushes

17. Key vocabulary  
fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance  
user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces

7. Links to topics and themes  
Celebrations Festivals Make Do and Mend  
Holidays Sustainability Containers  
other – specify

8. Possible contexts  
school home leisure enterprise  
sustainability outdoor environment  
other – specify

9. Project title  
Design, make and evaluate a \_\_\_\_\_ (product) for \_\_\_\_\_ (user) for \_\_\_\_\_ (purpose)  
To be completed by the teacher. Use the project title to set the scene for children's learning prior to activities in 10, 12 and 14.

### 3. Key learning in design and technology

#### Prior learning

- Have joined fabric in simple ways by gluing and stitching.
- Have used simple patterns and templates for marking out.
- Have evaluated a range of textile products.

#### Designing

- Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.
- Produce annotated sketches, prototypes, final product sketches and pattern pieces.

#### Making

- Plan the main stages of making.
- Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing.
- Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern.

#### Evaluating

- Investigate a range of 3-D textile products relevant to the project.
- Test their product against the original design criteria and with the intended user.
- Take into account others' views.
- Understand how a key event/individual has influenced the development of the chosen product and/or fabric.

#### Technical knowledge and understanding

- Know how to strengthen, stiffen and reinforce existing fabrics.
- Understand how to securely join two pieces of fabric together.
- Understand the need for patterns and seam allowances.
- Know and use technical vocabulary relevant to the project.

### 10. Investigative and Evaluative Activities (IEAs)

- Children investigate a range of textile products that have a selection of stitches, joins, fabrics, finishing techniques, fastenings and purposes, linked to the product they will design, make and evaluate. Think about products from the past and what changes have been made in textile production and products e.g. the invention of zips and Velcro.
- Give children the opportunity to disassemble appropriate textiles products to gain an understanding of 3-D shape, patterns and seam allowances.
- Use questioning to develop understanding e.g. *What is its purpose? Which one is most suited to its purpose? What properties/characteristics does the fabric have? Why has this fabric been chosen? How has the fabric been joined together? How effective are its fastenings? How has it been decorated? Does its decoration have a purpose? What would the 2-D pattern piece look like? What are its measurements? How might you change the product?*

### 12. Focused Tasks (FTs)

- Demonstrate a range of stitching techniques and allow children to practise sewing two small pieces of fabric together, demonstrating the use of, and need for, seam allowances.
- Allow children to use a textile product they have taken apart to create a paper pattern using 2-D shapes.
- Provide a range of fabrics – children to consider whether fabrics are suitable for the chosen purpose and user. The fabrics also can be used for demonstrating and testing out a range of decorative finishing techniques e.g. applique, embroidery, fabric pens/paints, printing.
- Use questioning to develop understanding e.g. *Which joining technique makes the strongest seam? Why? Which stitch is appropriate for the purpose? Which joining techniques are suitable for the fabric and purpose? How can you stiffen your fabric? What is the purpose of the fastenings? Which one is most suited to the purpose and user? What decorative techniques have been used? What effect do they have?*

### 14. Design, Make and Evaluate Assignment (DMEA)

- Children to create a design brief, supported by the teacher, set within a context which is authentic and meaningful. Discuss the intended user, purpose and appeal of their product. Create a set of design criteria.
- Ask children to sketch and annotate a range of possible ideas, constantly encouraging creative thinking. Produce mock-ups and prototypes of their chosen product.
- Plan the main stages of making e.g. using a flowchart or storyboard.
- Children to assemble their product using their existing knowledge, skills and understanding from IEAs and FTs. Encourage children to think about the aesthetics and quality finish of their product.
- Evaluate as the process is undertaken and the final product in relation to the design brief and criteria. The product should be tested by the intended user and for its purpose and others' views sought to help with identifying possible improvements.

### 11. Related learning in other subjects

- **Science** – physical properties of fabrics.
- **Spoken language** – asking and answering questions to develop understanding. Through discussion, participate actively initiating and responding to comments.
- **Mathematics** – nets of shapes and accurate measurements mm/cm.
- **History** – investigating textiles and textile products from age being studied.

### 13. Related learning in other subjects

- **Computing** – opportunity to create pattern pieces using a computer program.
- **Mathematics** – nets of shapes and accurate measurement mm/cm.
- **Science** – identify and compare the suitability of a variety of fabrics for particular uses.
- **Art and design** – investigating visual and tactile qualities of fabrics and using colour and pattern appropriately.
- **Spoken language** – develop technical vocabulary. Give well-structured descriptions of e.g. finishing techniques.

### 15. Related learning in other subjects

- **Art and design** – using a range of tools and decorative techniques. Develop sketching techniques.
- **Computing** – using software to produce pattern pieces and possible use for decorative techniques.
- **Mathematics** – accurate measurements mm/cm.
- **Spoken language** – consideration and evaluation of others' viewpoint.
- **Writing** – written evaluation of their product, organising it under e.g. headings, subheadings.

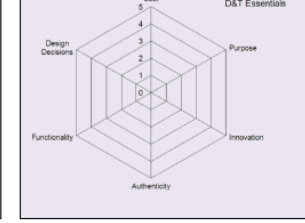
### 18. Key competencies

- problem-solving teamwork negotiation
- consumer awareness organisation motivation
- persuasion leadership perseverance
- other – specify

### 19. Health and safety

Pupils should be taught to work safely, using tools, equipment, materials, components and techniques appropriate to the task. Risk assessments should be carried out prior to undertaking this project.

### 20. Overall potential of project



- Take into account others' views.
  - Understand how a key event/individual has influenced the development of the chosen product and/or fabric.
- Technical skills:**
- Know how to strengthen, stiffen and reinforce existing fabrics.
  - Understand how to securely join two pieces of fabric together.
  - Understand the need for patterns and seam allowances.
  - Know and use technical vocabulary relevant to the project.

**Design Technology Knowledge Organiser**  
Year 3 - Autumn Term - Sewing

**Prior knowledge**

**Prior learning**

- Have joined fabric in simple ways by gluing and stitching.
- Have used simple patterns and templates for marking out.
- Have evaluated a range of textile products.

**Key skills**

- Generate ideas through discussions
- Develop design criteria for an appealing product
- Consider the user and purpose
- Evaluate a range of sewing skills and material types.
- Have used simple templates and patterns to create a final project.

**Vocabulary**

fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance

user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces

**Tool list**

- Felt
- scissors
- thread
- template
- BINCA
- Glue

**Other useful information**

Back stitch

Blindstitch

Woven

Backward running stitch

Over sew stitch

Blanket stitch

Running stitch

Knitted

Patched

**Glossary**

- **Appliqué** - means 'applied' - describes method of stitching/gluing patches onto fabric (originally to mend holes in worn clothes) to provide decoration.
- **Pattern/Template** - a shape drawn to exact shape and size and used to assist cutting out.
- **Seam** - a line of stitching that joins pieces of fabrics together.
- **Seam allowance** - extra fabric allowed for joining together - usually 1.5cm.
- **Prototype** - a model that is made to test whether a design will work.
- **Aesthetics** - the way in which the product looks with the nature and expression of beauty.

<b><u>Connections / deepening understanding</u></b>	<b><u>RADE</u></b>	<b><u>Assessment</u></b>	
	UNCRC – article 24		
Assessment recording for the unit - checking the level of pitch of the work			
<b><u>Key skill(s)/ knowledge to be assessed by the end of the unit</u></b>	<b><u>Lower attaining</u></b>	<b><u>Middle attaining</u></b>	<b><u>Higher attaining</u></b>

<b>Key skills:</b> <b>Designing</b> ●Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.	<b>The pupils can</b> Use pre-made toys that they have investigated to create a simple design for their own product.	<b>The pupils can</b> Use pre-existing toys to create a few of their own ideas for a toy. Choose which of their designs they will make and explain why.	<b>The pupils can</b> Produce a range of possible designs, based on the pre-existing products they have seen. Discuss the pros and cons of each design. Explain which one of their designs they will make and why.
<b>Key skills:</b> <b>Making</b> ●Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern.	<b>The pupils can</b> Talk about the different fabrics they have available to them and how they might use them to create their toy.	<b>The pupils can</b> Select a range of different materials and explain how they could be used within their designs. Explain why fabrics would be appropriate or not for their work.	<b>The pupils can</b> Select a range of different materials which will be used for their final design and explain their choices confidently, discussing aesthetics, quality, design, and other properties to show how it will meet the design brief.
<b>Key skills:</b> <b>Evaluating</b> ●Investigate a range of 3-D textile products relevant to the project.	<b>The pupils can</b> Look at different, pre-made soft toys and discuss what they like and don't like about them. Talk about the different parts which have been used to make the toy.	<b>The pupils can</b> Discuss different, pre-made toys and their preferences. Consider the different components of a toy and discuss how they think it was made. Talk about the purpose and intended user of the toy.	<b>The pupils can</b> Competently discuss a range of pre-made toys, including their intended user, component parts, aesthetic qualities and how they were made. Consider how each toy is different and why this is, including: intended user, age appropriateness, materials, fastenings, etc.
<b>Key knowledge :</b> <b>Technical Skills</b> ●Understand how to securely join two pieces of fabric together.	<b>The pupils can</b> Sew using a simple running stitch. Begin and end a run of stitches with some support.	<b>The pupils can</b> Thread a needle. Sew using a simple running stitch, to secure two pieces of fabric. Create some decorative stitches. Begin and end a run of stitches.	<b>The pupils can</b> Thread a needle and knot the end of the thread. Begin by securing their thread in the material, sew a run of stitches and securely finish their sewing at the end of the run.

NB: The assessments are completed for two reasons – to enable the class teacher and in turn the subject leader to evaluate the pitch of the learning within the unit in order to consider any necessary updates and for the class teacher to report to parents on the attainment of pupils in the end of year reports

● **Learn to sew – for adults to use for support / ideas / CPD:**

<https://www.youtube.com/watch?v=4WeLXueyW3w>

<https://www.youtube.com/watch?v=-Pgg42SV-KO>

\*There are a number of videos on YouTube called “Learn to sew” made by Debbie Shore, which may be useful to watch to develop staff knowledge or show parts of to the children to help them understand what they need to do.

**Notes:**

- Children could be asked to bring in old clothes, fabrics and leftover buttons, etc. to create their product to demonstrate how fabric can be reused / recycled to make a new product.