Unit 4A Money containers: Focus – structures: textiles Adapted from QCA Design and Technology Unit 4A

ABOUT THE UNIT

In this unit children learn how textiles containers *eg purses*, *wallets*, *coin bags and credit card holders* are designed for different purposes and different users. They design patterns/templates, and join and reinforce fabrics. Children develop their designing skills when evaluating products and use this information to generate their own ideas and identify design criteria. They communicate their early ideas through modelling with paper or inexpensive fabric, and use decorative techniques *including dyeing*, *embroidery or embossing*.

PRIOR LEARNING

It is helpful if the children have:

- joined fabrics in simple ways by gluing and stitching
- used simple patterns/templates for measuring and marking out
- · evaluated products

This unit builds on Units 1D 'Homes' and 2B 'Puppets'.

It also builds on Science Units 2D 'Grouping and changing materials' and 3C 'Characteristics of materials'.

VOCABULARY

In this unit, children will use words and phrases relating to:

- designing eg user, purpose, design criteria, model, evaluating, labelled drawings, stiffening, reinforcing, coins, notes
- making eg pattern/templates, strength, weaknesses, accurate, finishing
- knowledge and understanding eg fabric, fastening, compartment, zip, press stud, clasp, hook and eye, button, buckle, seam, seam allowance, reinforce, gusset, dye, embroidery
 - properties eg strength, hardwearing, stretch, fray

RESOURCES

- collection of purses, wallets, belt bags made from different materials, from different cultures, and with a range of fastenings
- selection of fabrics eg felt, calico, Hessian, foamtastic, synthetic leather
- selection of fastenings used on purses, wallets and bags
- scissors for fabric, thread, tape, needles, fabric glue, leather punch
- materials for decorative techniques eg embroidery thread and needles, dye, fabric crayon and paints, embossing powder, puffa-paint

Ref: QCA/98/254W

EXPECTATIONS

at the end of this unit

most children will:

some children will not have made so much progress and will:

some children will have progressed further and will:

have sufficient understanding and skills in working with textiles to design and make a money/credit card container that meets their design criteria; have evaluated existing products, testing fabrics to choose an appropriate one; have applied decorative techniques appropriately

have used given techniques and simple patterns/templates when joining fabric to make a money/credit card container, although seams and fastenings may not be secure

have developed a greater level of understanding and skill in working with textiles; have modelled their ideas, tested appropriate fabrics and justified choices; have decorated the product choosing from a range of decorative techniques; have made accurate drawings and identified the stages of making their design criteria; have worked independently in designing and making a money/credit card container that is well finished, works well and is suitable for the identified user



LEARNING OBJECTIVES

POSSIBLE TEACHING ACTIVITIES

LEARNING OUTCOMES

CHILDREN

1

POINTS TO NOTE

CHILDREN SHOULD LEARN

INVESTIGATIVE, DISASSEMBLY AND EVALUATIVE ACTIVITIES (IDEAs)

- · that products are designed for different purposes and different users
- · to evaluate products and identify criteria that can be used for their own designs
- · to make labelled drawings from different views showing specific features
- ∇ Provide opportunities for children to examine carefully a collection of money/credit card containers eg purses, wallets, money bags, credit card holders and belt bags. Focus the children's attention on the seams and seam allowance, fastenings and the names and number of parts used in construction and why they are used eg gusset, strap, hem.
- ∇ Discuss the different materials/fabrics used, how the material is reinforced. and the properties needed in the fabric eg hard-wearing.
- ∇ Ask the children questions eg Which purse is most suitable for a young child/teenager/adult? Which would be safest to keep your money in? Why is it useful to have compartments in a wallet? Which is the easiest to make? Are different materials more suitable for different designs? Which would be the most secure for coins? Which container would be best for storing money notes/credit cards.
- ∇ Discuss the different methods of decoration evident on money containers made of different materials. Discuss the different styles of decoration. Which styles will appeal to a young child/teenager/adult?
- Make a list of features essential to all money containers and those special to particular containers.
- Ø Discuss different fastenings eg buttons, press studs, hooks and eyes, Velcro, safety pins, lace, buckles. What products are they used on? How do they work? Why is the fastening appropriate for the use? Is the fastening a feature of the product?
- Ø Ask the children to make drawings and label the materials, fastenings, measurements and joining techniques used in a number of textiles containers.

- · understand that containers for money are designed for different purposes and users eg children, old people, walkers but have common features eg a fastener to keep the money safe, compartments to separate the money
- · identify criteria for a successful money container
- · draw products from different views, and label indicating the materials. fastenings, measurements and construction techniques used

Links to this unit

Information technology: Unit 4B 'Developing images using repeating patterns'

Mathematics: Number (sequence, alternate, double, half, remainder). measurement (standard, non-standard)

Literacy: Writing instructions. Use the vocabulary of this unit eg zip, clasp, seam to explore the relationship between nouns and verbs. Draw out the characteristic use of imperative verbs, link phrases and headings in instructional texts before the writing stage

Art: Use of patterns, textures

Homework

There are opportunities to investigate and practise some of these activities at home: comparing purses, wallets and bags, identifying the materials used, how they are held together and the different types of fasteners that are used.

∇ essential activities Ø optional activities assignment stages (all are essential)



| POSSIBLE TEACHING ACTIVITIES | LEARNING OUTCOMES | POINTS TO NOTE (cont.) |
|---|---|---|
| | CHILDREN | |
| S (FPTs) | | |
| ▼ Demonstrate and allow the children to practise techniques <i>eg running stitch</i>, <i>back stitch</i>, <i>starting/finishing</i>. ▼ Ask the children to sew two small pieces of fabric together in different ways and use different adhesives to glue materials together and then test which joining method makes the strongest seam. ▼ Ask the children to model ideas for money containers using newspaper/paper/pins/staples or pins/masking tape. Take these apart carefully and use as a template to make a paper pattern. Show children how to add a seam allowance and discuss when it is needed. ▼ Discuss with the children how fabrics are made and their different properties <i>eg woven, bonded and knitted, fraying/non-fraying/stretchy/hard wearing</i>. Choose tests to carry out in order to help decide on suitable fabric for a container; test out a small range of fabrics <i>eg felt, calico, baize, denim, drill, needlecord</i>. ▼ Demonstrate and allow the children to try out suitable decorative techniques and display examples of the results <i>eg dyeing, embroidery, appliqué, fabric paints</i>, embossing powder, puffa-paint. Ø Children could try out methods of securing different fastenings and evaluate their suitability. Ø Children could practise stiffening fabric using vylene or thin card and putting in a gusset to allow more space in the purse/bag. | understand that joining needs to be secure and strong demonstrate a variety of ways of joining fabric understand that by modelling they can try out ideas quickly and check if an idea will work make a pattern/template with a seam allowance carry out simple fabric tests and choose fabric to meet functional requirements use simple decorative techniques | Content Have a range of purses and/or bags to examine and analyse how they are constructed. If possible take a purse or bag apart to show the component parts or use a paper mock-up. Teachers will need to demonstrate a range of skills and techniques to the children. Less able children may need support in making a pattern/template and cutting the fabric. Use and modify a simple photocopied pattern if you anticipate difficulties. Class management A range of examples with simple instructions will be useful teaching aids for this work. Have large lengths of fabric cut into |
| | ♥ Demonstrate and allow the children to practise techniques eg running stitch, back stitch, starting/finishing. ♥ Ask the children to sew two small pieces of fabric together in different ways and use different adhesives to glue materials together and then test which joining method makes the strongest seam. ♥ Ask the children to model ideas for money containers using newspaper/paper/pins/staples or pins/masking tape. Take these apart carefully and use as a template to make a paper pattern. Show children how to add a seam allowance and discuss when it is needed. ♥ Discuss with the children how fabrics are made and their different properties eg woven, bonded and knitted, fraying/non-fraying/stretchy/hard wearing. Choose tests to carry out in order to help decide on suitable fabric for a container; test out a small range of fabrics eg felt, calico, baize, denim, drill, needlecord. ♥ Demonstrate and allow the children to try out suitable decorative techniques and display examples of the results eg dyeing, embroidery, appliqué, fabric paints, embossing powder, puffa-paint. ② Children could try out methods of securing different fastenings and evaluate their suitability. ② Children could practise stiffening fabric using vylene or thin card and putting | ▼ Demonstrate and allow the children to practise techniques eg running stitch, back stitch, starting/linishing. ▼ Ask the children to sew two small pieces of fabric together in different ways and use different adhesives to glue materials together and then test which joining method makes the strongest seam. ▼ Ask the children to model ideas for money containers using newspaper/paper/pins/staples or pins/masking tape. Take these apart carefully and use as a template to make a paper pattern. Show children how to add a seam allowance and discuss when it is needed. ▼ Discuss with the children how fabrics are made and their different properties eg woven, bonded and knitted, fraying/non-fraying/stretchy/hard wearing. Choose tests to carry out in order to help decide on suitable fabric for a container; test out a small range of fabrics eg felt, calico, baize, denim, drill, needlecord. ▼ Demonstrate and allow the children to try out suitable decorative techniques and display examples of the results eg dyeing, embroidery, appliqué, fabric paints, embossing powder, puffa-paint. ♥ Children could try out methods of securing different fastenings and evaluate their suitability. ♥ Children could practise stiffening fabric using vylene or thin card and putting in a gusset to allow more space in the purse/bag. |

∇ essential activities ⊕ assignment stages (all are essential)

Ø optional activities

seam (1-1.5cms), pinning the pattern/template, and cutting out the fabric.

• Children could be given a maximum size for their design and a limited

range of fasteners.

Ref: QCA/98/254W



| LEARNING OBJECTIVES CHILDREN SHOULD LEARN | POSSIBLE TEACHING ACTIVITIES | LEARNING OUTCOMES CHILDREN | POINTS TO NOTE (cont.) |
|--|---|--|---|
| DESIGN AND MAKE ASSIGN Design and make a money of | IMENT (DMA) container for themselves or someone else | | |
| how to design a product using textiles for a specific purpose to appreciate the aesthetic qualities of a design to draw up simple design specifications to make a plan of how to make the product how to make a paper pattern/template that uses a seam allowance to measure, tape or pin, cut and join fabric with some accuracy to evaluate their product identifying strengths and areas for development against the original | Discuss with the children the purpose and the user of the money/credit card container. Ask the children to draw up a simple design specification eg it must be small, keep the money or cards safe, have compartments. Ask them to put the list of points in order with the most important ones coming first. Encourage the children to draw or model their ideas using inexpensive fabric or paper, then choose the most appropriate material for the intended user. Make a final drawing indicating fabric and fastenings to be used, simple measurements and techniques. Ask the children to write a simple action plan. Remind the children about a seam allowance when making their pattern/template and to avoid fabric wastage when cutting. Ask the children to make their product, suggesting modifications to their design if difficulties arise during the making process. Children should note changes in their designs as an appendix to their final drawings. Key questions include: How well is this working? Is it what the user wants? What could we do to make it better? How could we improve the way it looks? Feels? Opens? Closes? What do you need to change? What effect will this have? | apply what they have learnt through IDEAs/FPTs in their designing and making write a simple specification bearing in mind the intended user produce drawings with labels to show what they intend to make and the sequence of their work order the sequence of their work construct their money container with some accuracy evaluate their product against their specification | Health and safety 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: • take care with the storage of sharp objects <i>eg pins and needles</i> . Felt pads with lines drawn on are useful for storing and checking needles. On-going work with needles attached can be stored in resealable bags • follow instructions for the correct storage, use and disposal of fabric dyes and paints |

Ø optional activities

⊕ assignment stages (all are essential)

∇ essential activities

specifications



| LEARNING OBJECTIVES CHILDREN SHOULD LEARN | POSSIBLE TEACHING ACTIVITIES | LEARNING OUTCOMES CHILDREN | POINTS TO NOTE (cont.) |
|--|--|--|--|
| DESIGN AND MAKE ASSIGNM Design and make a money co | MENT (DMA) (cont.) ontainer for themselves or someone else | | |
| | Encourage the children to evaluate the finished bags or purses by testing in use, discussing strengths and areas for development of both appearance and function and encouraging children to suggest improvements. Does the container meet the criteria? How have you tested the container? Would it do the job better if it were better made? How could it be better made? Discuss with individuals what they have learnt from the project and agree some goals for the next design and technology activity. | evaluate their product against their specification | Ask the children to use their money container for two weeks and then evaluate how well it works by discussion in class. Children could be encouraged to develop their sewing, weaving or knitting skills to make other textiles products for themselves or as gifts. |
| | ∇ essential activities ∅ optional activities ⊕ assignment stages (all are essential) | | |