Design Technology

Textiles Year 6

KS2 Design

To 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.

National curriculum

To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.

To 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

To investigate and analyse a range of existing products.

To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

To understand how key events and individuals in design and technology have helped shape the world

detailed labelled drawings.

3D
attach
backstitch
blanket stitch
button
cross stitch
design
designers
fabric
fastenings

press stud
products
running stitch
stitch sewing
specifications
tch sustainable
velcro
s zip
repair
gs reuse
recycle

investigate					
Technical	knowledge				

specification to guide their thinking

-Research product for appeal,

-Develop a simple design

function, manufacture and

audience.

Ye-communicate their ideas through

Design

Year 5 / 6 gh -Use techniques that involve a

- number of steps
 -Demonstrate resourcefulness
- when tackling practical problems
 -A 3D textiles product can be made
 from a combination of fabric

Make

shapes
- Pin, sew and stitch materials together to create a product.
-Achieve a quality product.

-Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make

Evaluate

-Evaluate their ideas and products against their original design specification









Learning objective

Lesson outline

Lesson 1: Investigate/ practical

LO: To research product (repair kits) to create own design criteria.

DT Skills: -Research product for appeal, function, manufacture and audience Develop a simple design specification to guide their thinking Resource summary: DT folder template, felt pens, sample repair kits.

The lesson starts with a brief introduction by the teacher using some sample repair kits/portable sewing sets as stimulus material.

In the introductory lesson the class should be asked to brainstorm in groups their own textile or fabric repair needs. What are they? What do they do about them?

Each group should have a template and felt pens of two different colours. Next to each brainstorm ideas of things that may need fixing or altering for a different purpose, using another colour pen, they should write what they use to deal with it, e.g. a pin. This will establish the basis for further discussion about what we use to fix problems we may have with textiles.

The groups should then share with the rest of the class their findings and brainstorm charts.

The children should list all the textiles used in their home with a list of what sorts of things happened to them and how they are repaired, if at all. A brief description should be given of any 'FabFix' resource existing in their home now. They should then list all the household fabric repair needs and match them with tools and other resources, for example:

Need	Tool	Resource
sew button	needle	cotton button
rip in curtain	sew	machine

A brief description should be given of any 'FabFix' resource existing in their home now.

Lesson 2: Investigate/ practical

LO: To use a range of techniques to create a 'FaFfix' repair kit.

DT Skills:

- -A 3D textiles product can be made from a combination of fabric shapes
- Pin, sew and stitch materials together to create a product.

From examining the commercial repair kits, children now choose what is sensible to have in their own resource. They should write a design specification in their DT folders. They will refer back to previous research.

The FabFix is like a little book made of fabric. Its pages are made from felt, each page holds a different resource. The cover is made from binca, embroidered and lined.

You need:

- 1 piece of binca
- 1 piece of calico lining
- 1-2 pieces of felt.

Lesson 3: Design

LO: To produce a detailed set of labelled designs indicating materials, tools, methods and measurements.

DT Skills:

-Develop a simple design specification to guide their thinking -communicate their ideas through detailed labelled drawings.

Childen to produce a detailed design including an exploded diagram and labels. All designs are work in progress and should be annotated along the design and make process

- . The children should answer these questions.
- Deciding on the dimensions of your FabFix.
- How big should it be? (A5 is a useful guide)
- What goes inside? Refer to look at the design specification from Session 3
- What shall I embroider on the front?
- What colour lining would be best?

Lesson 4/5: Making

LO: To use a range of techniques to make a quality product (phone sock/covering).

DT Skills: -Use techniques that involve a number of steps -Demonstrate resourcefulness when tackling practical problems -A 3D textiles product can be made from a combination of fabric shanes

- Pin, sew and stitch materials together to create a product.
- -Achieve a quality product.

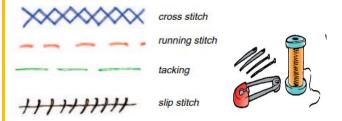
Decorating the binca cover Cross stitch is the suggested stitch. First decide which way up the FabFix will be.

Pin a small hem all around the binca and tack in place using big even stitches.

Pin and tack the calico lining the same way. Put them together and pin and tack them. There should be 3 layers of tacking. Use a small slip stitch to join the binca and calico all around the edge.

Take out all the tacking. Now apply a row of cross stitch all around the end of the binca to firm the edae.

Cut 1-2 pieces of felt the same size as the FabFix cover. Attach them down the middle with a small running stitch. Add needles, pins, safety pins, etc. to the FabFix.



Lesson 6: Evaluate

LO: To evaluate quality of design and final product by focusing on purpose and manufacture.

DT Skills: -Critically evaluate the quality of the design,

It should also be evaluated against the design specification written. This will be written in the DT folder. It should also be evaluated over time while it is in use. A report could be written as a homework activity in the notebook. This would be the final evaluation and could be used for assessment. Here are some good questions to ask.

Does your FabFix look the way you planned it to look? If not, why not?

manufacture and fitness for purpose of their products as they design and make -Evaluate their ideas and products against their original design specification	 Do you think your FabFix will work when it is being used at home? If not, why not? Does your FabFix meet all the criteria in your design specification? If not, why not? Which was the most difficult part of making your FabFix? Why? What is the best thing about your FabFix? 				
Working towards		End of unit assessment Working at Age related expectations	Working at a greater depth		