



What should I already know?

- I can join fabrics together using different stitches
- Different textiles have different properties e.g. waterproof, hardwearing, insulating
- I can use pattern pieces to help cut out fabric shapes

DT

Inventors look for problems so that they can plan, design, make and evaluate solutions to make the world better.

Technical vocabulary

Mock up	Quick 3-D modelling using easy to work and cheaper materials.
Pattern	A shape drawn to exact size and shape to assist in cutting out
Seam allowance	Extra fabric allowed for joining together – 15mm for domestic purposes
Specification	Describes what a product has to do
Tacking	Large running stitches to hold pieces of fabric together temporarily
Working drawing	Detailed drawing contains all information needed to make a product but is updated as changes are made.
Seam	A line where two pieces of fabric are sewn together
Right side	The side of the fabric which will face outwards when the project is finished
Wrong side	The back of the fabric or the side that will be hidden when the product is finished
Fastenings	A device that closes or secures something

Fastenings

Fastenings are used to close or secure something. They all have different purposes so should be appropriate for the product.



THOUGHT

- What are the features of a successful product?
- What features do I need to include in a functional, innovative and authentic product?
- What knowledge and skills do I need to be able to design and make a good quality product?
- How do I make a paper pattern for the product I want to produce?
- What design decisions do I need to make?
- How can I communicate my ideas for my product in an effective way?
- How will I show innovation?
- Who will be the user of my product and what are their needs, wants and values?
- What will be the purpose of my product?
- More thoughts... appraising, reflecting, refining.
- Does my product meet the needs and wants of the user?
- Is it appealing and does it fulfill a purpose? Is it innovative?

ACTION

- Researching, investigating, disassembling and evaluating existing products and consulting 'real life' designers.
- Investigating and practising using a range of methods to join fabrics together and making judgments about the strength and appropriateness of each technique.
- Practising finishing techniques and, if possible, learning to use a sewing machine.
- Creating a 2-D paper pattern with a seam allowance.
- Developing ideas through research, working drawings, computer-aided design, discussion, paper mock-ups and modelling.
- Thinking about the user and purpose and developing specifications for products.
- Formulating a clear plan of work and allocating tasks if appropriate.
- Constantly self-evaluating and making changes if the product is not fulfilling the specification.
- Testing final products with the intended user and making an evaluation of how successful they are.

Mock ups

- Mock ups can be used to check proportions and scale.
- They can be made out of paper to check that a design will work before using fabric.

Joining fabrics

- Choose two similar fabrics
- Pin the fabric pieces together with the right sides together
- Secure the first stitch in place
- Sew about 15mm from the edge to leave a seam allowance
- Leave a gap to turn the fabric to the right way round



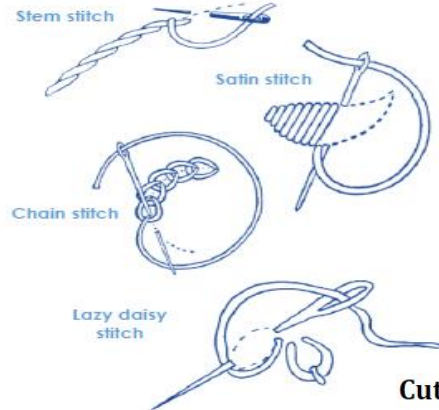
Extra information



Joining techniques

Different stitches can be used to join fabric together. Different stitches have different purposes and should be used in different situations.

Stitches



Back stitch

Backwards running stitch

Over sew stitch

Blanket stitch

Running stitch

Cutting out techniques



Cutting out techniques

Ensure template is secured to fabric to allow for accuracy. Double sided tape or pins can be used for this.

Place pattern pieces carefully to avoid wastage.



Fabric types

Fabrics are constructed in different ways. They are used for different purposes and have different properties.



Bonded



Woven



Knitted



Felted

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.