

7. E-TEXTILES

E-Textiles is a process of including **electronics** within a textiles product. Eg. Lights with a jumper.

When creating this within a product an electrical circuit must be made. This is made by stitching with **conductive** thread to allow the current to pass from the battery to the LED light. Stitches serve a purpose when using conductive thread.

If there is a break in the stitching the electrical current will not continue. Resulting in an unsuccessful circuit.

The equipment you would use for sewing is a needle, thread, fabric and scissors. The hole in the needle where you insert the thread is called **the eye** of the needle.

You should always use an arm's length of thread to stop unwanted knots being made.

Running stitch is the stitch you would use to **join fabrics** together. The stitch goes **in and out** of the fabric. You start at the back (wrong side) of the fabric.

8. SEWING MACHINES

Industrial—Relating to or characterized by industry .

A sewing machine is a machine with a mechanically driven needle for sewing or stitching fabrics together.

The parts of a sewing machine are:

the needle, the presser foot, the presser foot lever, bobbin (spool), bobbin (spool) case, reverse, handwheel (dial), feed dogs (teeth).

Sewing machines use a different method of stitching to that completed by hand. The stitch used by hand is called a saddle stitch, the stitch used by sewing machine is called a lack stitch.

A saddle stitch involves threads being passed back and forth each hole.

A lock stitch involves threads being interlocked in the middle of stitching by two separate threads.

Both hand and machine stitches can be both decorative and

8. SEWING MACHINES

A **presser foot** is an attachment used with sewing machines to hold fabric flat as it is fed through the machine and stitched .

The **function** of the **sewing machine needle** is to produce a hole in the material for the thread to pass through and to do so without causing any damage to the material.

A **bobbin** is the part of a **sewing** machine on where the lower thread is located. The machine makes a stitch by catching the bottom thread, from the **bobbin**, with the top thread, from the needle.

The act of using a **reverse stitch** is called backstitching. Backstitching is achieved by **sewing** at the beginning and end of a seam back and forth, on top of the seam stitches, to keep the **stitching** from being unravelled.

Domestic machines are designed to be used for a couple of hours at a time, and the user is able to stop and start a project easily. ... **Industrial machines** are designed for a more heavy-duty workload; being able to run for longer hours and deal with more intense projects than a **domestic machine**.

9. APPLIQUE AND ENTRAPMENT

Appliqué – Applique is to decorate fabric by cutting pieces of material and **applying** them to the surface of another using stitch.

Entrapment is similar to applique where by you cut out pieces of materials and apply them to the surface of another using stitch.

However with **entrapment** you place beads, sequins and other small decorative items under the fabric that is stitched down.

The fabric used for entrapment is usually **transparent** or **translucent** (semi – transparent).

Transparent mean that a material allows light to pass through so that objects behind can be seen.

Equipment you would need for **entrapment** are the same for applique and embroidery.

10. FINAL DESIGNS

final designs – final designs are the last drawings of what a product will look like, including any embellishments on front and back views before the prototype is made.

Composition—Composition means the way in which a whole or part of something is made up. A synonym would be layout.

When creating your final design it is important to note

It must meet your **design brief**. Make sure it is suitable for your **target audience**. (See box 1 term 1 for definitions of these terms)

Your back **MUST** include some ideas from your previous drawings and use textiles techniques.

Use colour **rendering techniques** to **accurately represent** your idea.

Annotation—You will need to annotate design ideas carefully.

Annotations are labels of what you have drawn. E.g. Write the colour of thread or technique you want to use.

11. PRODUCT MAKE

Innovative—(of a product, idea, etc.) featuring new methods; advanced and original.

Embroidery - Embroidery is the craft of decorating fabric or other materials using a needle to apply thread and other components eg. Beads and buttons.

The equipment you would use for embroidery is a needle, thread, fabric, an embroidery hoop and scissors.

The hole in the needle where you insert the thread is called **the eye** of the needle.

Stitches can either be decorative or serve a purpose. You should always use an arms length of thread to stop unwanted knots being made.

Buttons are commonly used as **fastenings** however they can be decorative. They are also components.

When **components** such as beads, buttons and sequins are added to materials for **decorative** purposes, these are often referred to as **embellishment**.