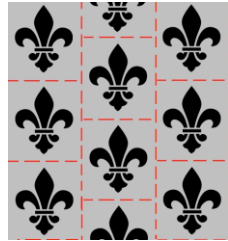


Types of repeat pattern:



block or full drop repeat



half drop repeat



tossed / random repeat



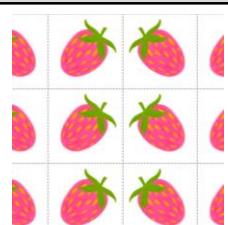
stripe repeat



brick repeat



turnover layout



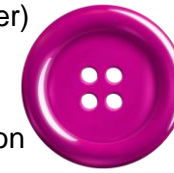
mirror repeat

component:

an item that completes a textile artefact / product



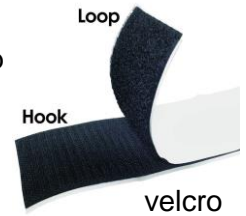
metal snap fastener (popper)



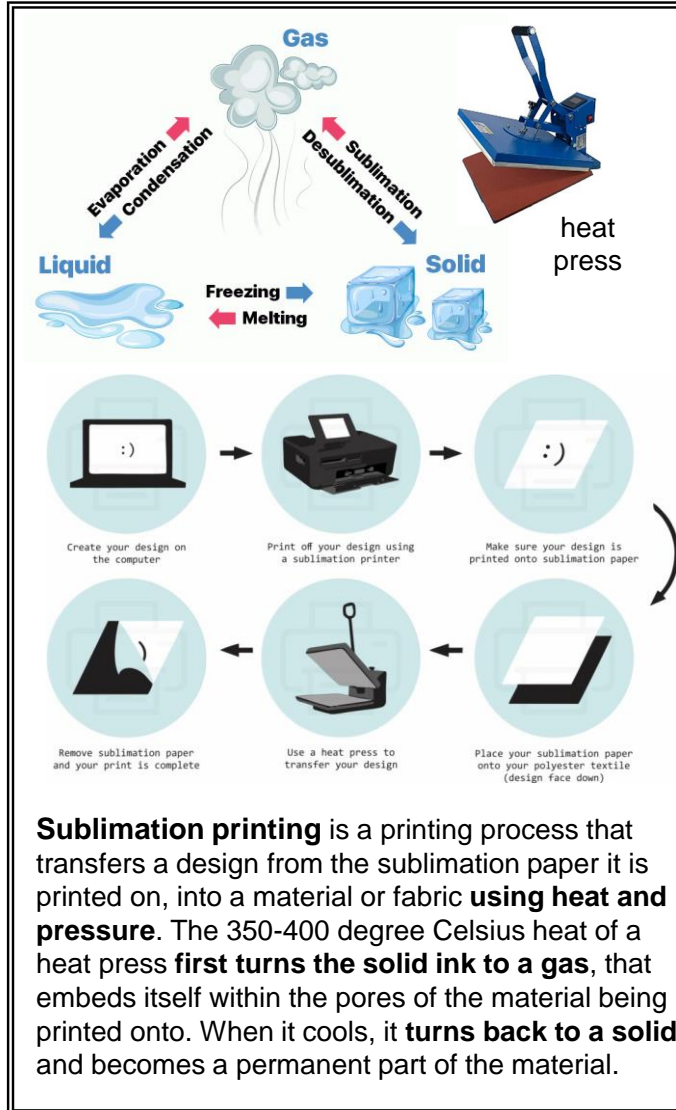
button



zip



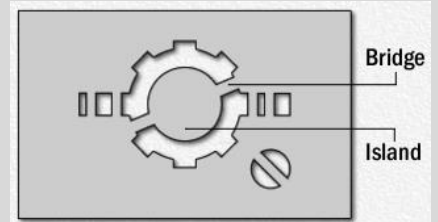
velcro



Sublimation printing is a printing process that transfers a design from the sublimation paper it is printed on, into a material or fabric **using heat and pressure**. The 350-400 degree Celsius heat of a heat press **first turns the solid ink to a gas**, that embeds itself within the pores of the material being printed onto. When it cools, it **turns back to a solid** and becomes a permanent part of the material.



Stencilling is a technique used to create a design by passing paint through holes cut in a material such as card, plastic or metal. A key advantage of stencilling is that the same design can be repeated very easily.



- A** is for **Aesthetics**
- C** is for **Cost**
- C** is for **Customer**
- E** is for **Environment**
- S** is for **Size**
- S** is for **Safety**
- F** is for **Function**
- M** is for **Material**

Material properties:

Working properties: *how a material reacts to a type of applied force*

- **strength:** the ability to withstand a force or load such as **tension** (pulling) and **torsion** (twisting)
- **elasticity:** the ability to return to its original shape when a force on it is removed

Physical properties: *a measurable characteristic of a material*

- **absorbency:** the ability to draw in moisture

natural fibres:

- come from **plants and animals**
- are **biodegradable** and **sustainable**
- are **non-allergenic**

cotton: strong, durable, absorbent, crease easily

wool: warm, soft, absorbent, crease resistant

silk: smooth, lustrous, strong

synthetic fibres:

- are made from chemicals found in **fossil fuels**
- are **less sustainable** than natural fibres as fossil fuels are non-renewable
- can **cause more environmental damage** through extracting the fossil fuels and through the processes used to make the fibres
- are **not biodegradable**

elastane (Lycra): extremely elastic, strong, durable, lightweight, not absorbent, highly flammable

polyester: strong, durable, highly elastic, crease resistant, dries quickly, not absorbent, melts as burns

polyamide (Nylon): strong, durable, warm, good elasticity, crease resistant, not very absorbent, melts as burns

biodegradable (adj): able to be decomposed by bacteria or other living organisms, therefore avoiding pollution
sustainable (adj): able to be maintained now and for the future

CAD = Computer Aided Design



- allows designers to model and change designs quickly
- extremely accurate
- easy to experiment with alternative colours and shapes
- easy to share designs with other people around the world



- can be expensive to buy software so high set up costs
- time and money needed to train people to use the software

CAM = Computer Aided Manufacture



- very high levels of precision and accuracy
- very efficient as machines can run 24-7
- can increase the speed of manufacture
- complex shapes can be made much more easily than by hand



- initial set up costs can be very high
- specialists often needed to fix problems, or training needed.
- manufacture can come to a stop if machinery breaks