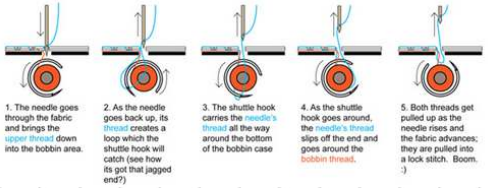
YEAR 9 TEXTILES KNOWLEDGE ORGANISER

Ethical fashion
Eco fashion
Green fashion

Finite resources are ones which are in limited supply or that cannot be reproduced. Non finite resources are ones which are in abundant supply and are unlikely ever to be exhausted, or ones that can be grown and replaced at the rate they are being used.



When you have finished
- ❖ Raise the presser foot
- ❖ Take out your work
- ❖ Pull the threads long again
- ❖ Cut of your work

Health & Safety

Sustainability

Ecological & Social

Bamboo is a sustainable source for fibres.

Bamboo fibres are fantastic for clothing. They have hollow fibres giving it breathing capabilities. The fibre is filled with micro holes which allow for better moisture absorption and ventilation than some other fibres.

What makes bamboo sustainable?

- Fast growing grass - 3 months instead of 30 years.
- Bamboo needs no fertiliser or pesticides to grow.
- Bamboo self regenerates from its roots, so it doesnt need to be replanted.
- Bamboo is much less costly to produce and products are biodegradable.

Ecological issues such as farming and drilling for raw materials. A company's social footprint measures their effect on people and communities. This can be in terms of employment as well as the amount of noise a factory makes

Knowledge

- Health and safety
- Sustainability and fabrics
- Environmental and social impacts/issues
- Standard components and stock forms
- Product analysis
- Production methods
- Product development
- Product construction

Product Analysis

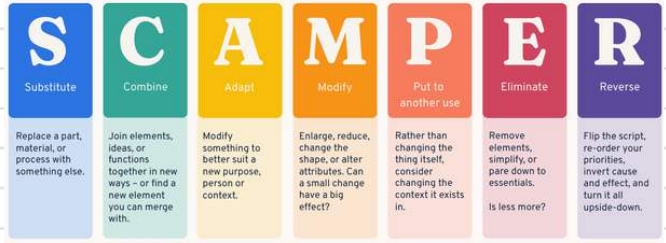
Product Development

Production methods

Components and stock forms

Product analysis allows designers to understand how products work and how they could be improved. This then helps them to produce better designs of their own. In this activity learners will learn about two techniques that are commonly used to analyse existing products – the 5 Ws and ACCESS FM

Design and development involve **creating working drawings and parts lists to enable a third party to manufacture the design**.



Flexible manufacturing systems (FMS) are a series of different machines producing different parts for a product. The system is flexible because, at any time, machines in the process can be Reprogrammed to change their task and production can be changed to produce more or fewer parts without stopping the other areas of the process.

Just in time (JIT) manufacturing is triggered by a customer order. The correct amounts of materials are ordered in to cover the order, and these arrive just as they are needed by production. This saves money on storage, reduces waste and ensures there is no money wasted producing stock that will remain unsold. There are disadvantages to the system in that, if any part of the product cannot be sourced, clients have to wait for their order to be produced.

Lean manufacturing is a Japanese concept, based on minimising costs and maximising efficiency by cutting down on waste and the amount of materials and energy used in production. This is done by adapting designs and making changes to the production process. For example, to reduce waste, a packaging net could be redesigned to include a tessellating pattern or, to improve efficiency, changeover times between production runs could be reduced.