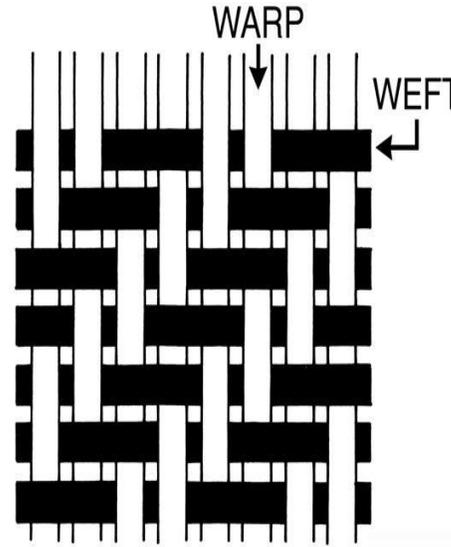


D &T Knowledge Organiser: Year 9



Homework 1	Homework 2	Homework 3	Homework 4
Bring in ideas to create a mood board for a bucket hat	The 6 Rs Q & As	Complete production planning sheet.	Complete project evaluation.



Key words

- circular economy
- Iterative design
- recycle
- reduce
- refuse
- repair
- rethink
- reuse
- sustainability
- 6 R's

Design Brief

Investigate the current trend of recycling and reusing materials as a starting point for upcycling a pair of jeans

Projects requirements-

- 1) Recorded an understanding of **environmental issues**, including the 6 R's
- 2) You must research **recycled denim products**
- 3) **Analyse at least 2** different denim products. (use the analysis worksheet to help you)
- 4) Research a **fashion or textiles designer** that uses **recycled materials** in their work and complete a designer study.
- 5) Produce at least **4 annotated design ideas**, using the **iterative design process**.
- 6) Make your own **prototype and pattern template** for making your product.
- 7) Make a **finished product**
- 8) **Produce a detailed product plan**.
- 9) Complete a project **evaluation**.

analyse	examine (something) in detail, to explain and interpret it.
annotate	add notes to a design or diagram giving an explanation or comment.
embellishment	a decorative detail added to fabric to make it more attractive.
fastening	a device that closes or secures something. E.g. "a fly-front fastening" (zip)
pattern piece or template	a shaped piece of rigid material used as a pattern for processes such as cutting out, shaping, or drilling.
prototype	a first or preliminary version of a product from which other forms are developed.

Denim

Denim is a sturdy cotton warp-faced textile in which the weft passes under two or more warp threads. This twill weaving produces a diagonal ribbing that distinguishes it from cotton.



The 6 R's

RETHINK: Do we make too many products? Design in a way that considers people and the environment.

REFUSE: Don't use a material or buy a product if you don't need it or if it's bad for people or the environment.

REDUCE: Cut down the amount of material and energy you use as much as you can.

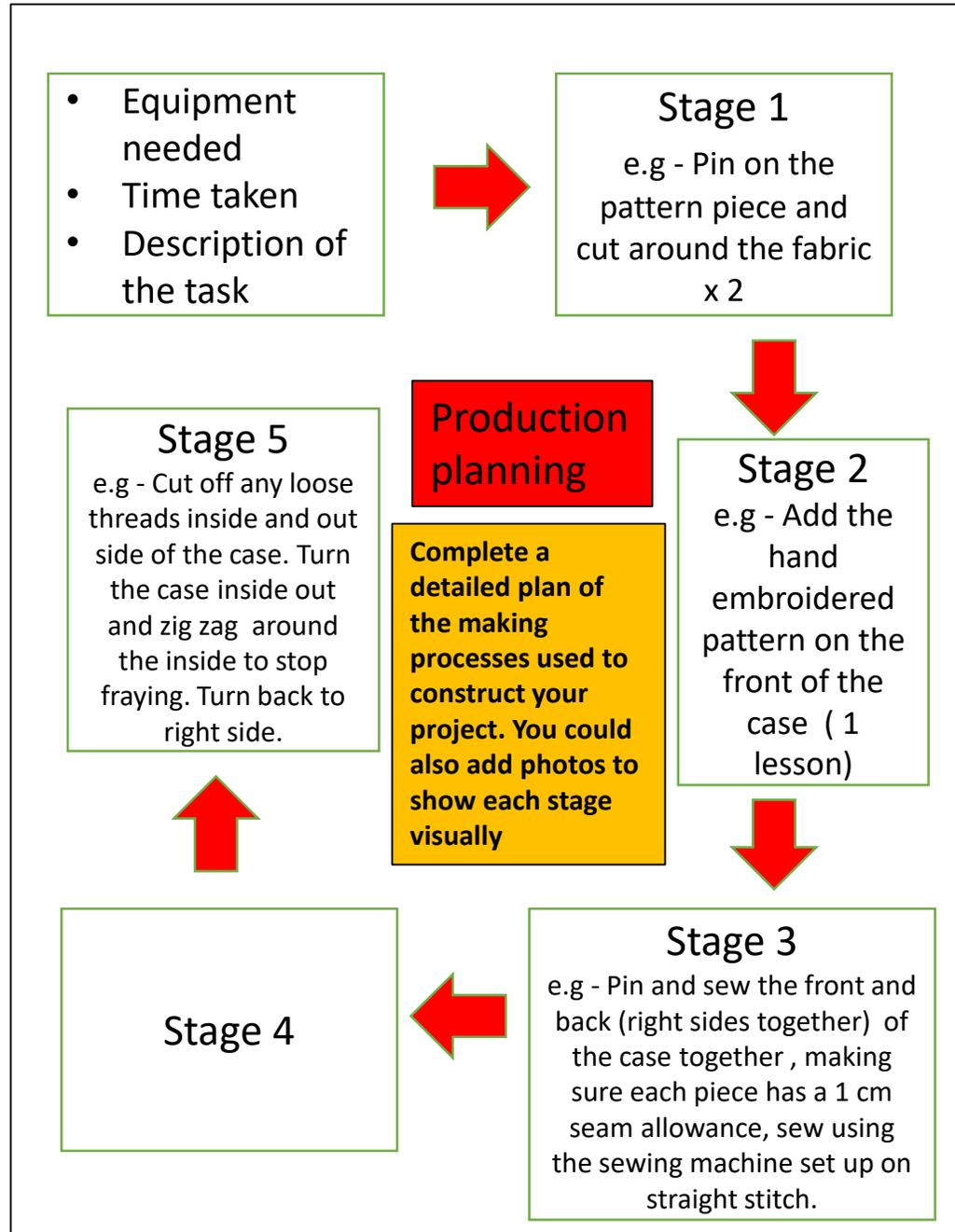
REUSE: Use a product to make something else with all or parts of it.

RECYCLE: Reprocess a material or product and make something else.

REPAIR: When a product breaks down or doesn't work properly, fix it.

Sustainability

Sustainable - refers to products that have been designed and made to have a lesser impact on the environment.



THE CIRCULAR ECONOMY

A **circular economy** is based on the principles of designing out **waste and pollution** keeping products and materials in, regenerating natural systems



Iterative Design

Iterative design is the process of continual improvement of a concept, prototype, design or product.

By frequently testing, developing and evaluating a product feedback can be given to create a final solution or design that fits a users needs.