

## Design Technology Textiles

## History and Product Design

Year 8

## Home Learning Booklet

Name \_\_\_\_\_

Tutor Group \_\_\_\_\_

Teacher \_\_\_\_\_

Given out: Monday 25 November      Hand in: Monday 2 December

Parent's Comment

Staff Comment

Target

## Aims and Objectives

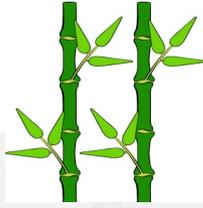
The aim of this booklet is to develop your understanding of Textiles and Design. To look at man made and natural materials and how they are used.

- Develop your research skills.
- Apply technical knowledge to explain how textiles can be formed and used
- Learn to improve presentation skills.
- Use development in producing a final product.

## Tasks

1. Complete some research and summarise your findings.
2. Demonstrate further learning by explaining how fabrics are produced.
3. Complete a design section.
  1. Evaluate your design ideas and ask others what they think.
  2. Produce a final design solution and evaluate it.





## Fabric and Textiles

There's just so much to say about the history of fabric...It's almost as basic a human need as food or shelter, truly. Where would we be without our clothing, our blankets, our sofas, our mattresses, our curtains? The list goes on and on.

Fabrics first appeared in the middle east during the stone age and there is evidence to support the wearing of clothes as far back as 500 000 years, although those would have consisted of skins, furs and reeds. The earliest sewing needle to have been found dates back to France about 19 000 BC but possible needles have been found which date back an astounding 40 000 years. Dyed flax fibres found in a prehistoric cave in Georgia, Eurasia have been dated to 36 000 years ago. Evidence has been found of weaving in the Czech Republic, in the form of impressions of textiles, baskets and nets on clay dating back as far as 27 000 years. The basis of any fabric is, of course, the textile, which consists of either felt or spun fibres which are made into yarn. The yarn can be woven, netted, knitted or laced, interlaced or felted to form a fabric.

The nature of the fabric depends on the dye and type of textile available to the culture... there was a time when only naturally occurring fibres were available and so the choices were limited to wool, cotton, silk and flax (linen). Indeed, animal textiles are still the most common textiles in our society. Silk, pashmina and wool are good examples of animal textiles. Plant textiles are made from cotton, straw, grass, rubber or bamboo and mineral textiles are made from glass fibre, asbestos or metal fibre.

Synthetic fibres were only invented a century ago, mainly to combat the age old problems of wrinkling and lack of elasticity. Attempts were being made to synthesize fibres for 200 years before that, but the synthesized petroleum compounds and chemistry necessary only reached that level a century ago. It's amazing to think that Nylon was only invented in 1939!

However, there has been a downside to the availability of mass produced cheaply manufactured textiles especially clothing. More than 1 million tons of textiles are thrown away every year - at least 50% are recyclable or could be used for Upcycling. It has been estimated that If everyone in the UK reclaimed one woolen garment, it would save 480 tons of chemical dyestuffs and the equivalent of a whole reservoir of water. Also synthetic textiles do not break down in landfill site which is another good reason for upcycling.



## TASK 1.

Having read the article on the history and types of textiles answer the following questions.

1. What is the earliest evidence (so far) of the wearing of clothes and what types fabrics were used?

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2. When is the earliest (so far) evidence of needles being used and where were they found?

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3. What date is the earliest evidence of a dyed fabric (found so far) and where was it found?

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4. Where has the earliest evidence been found of weaving and where was it found?

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5. What types of things were woven?

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6. What is needed to produce the material to produce a fabric?

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7. How is it used to produce a fabric?

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8. Name 3 natural sources of fibres and 3 synthetic sources of fibres ?

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When was the earliest attempt made to produce a synthetic fibre and when was nylon invented ?

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Why is it a good thing for the planet to recycle or upcycle ?

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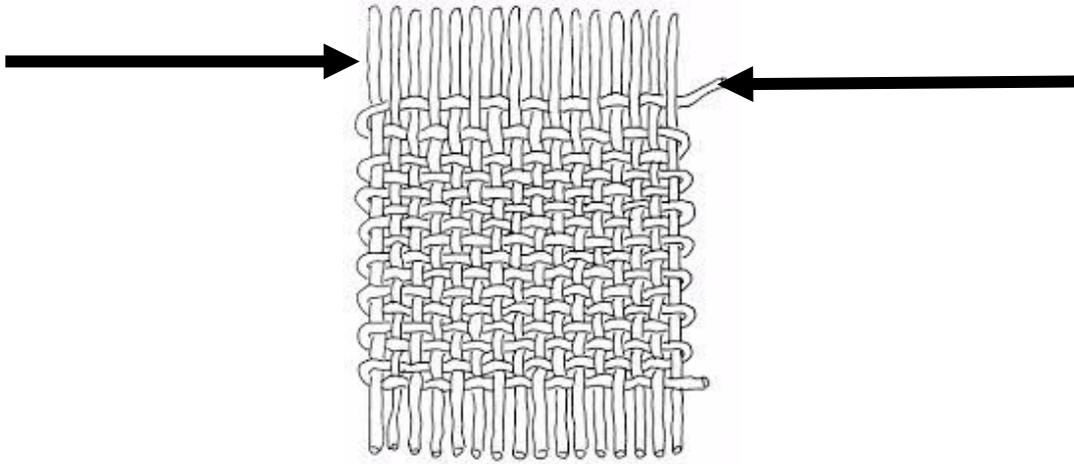
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## TASK 2.

A) Can you name the sections that go to make a fabric?



B) Sketch and annotate a simple loom

### TASK 3

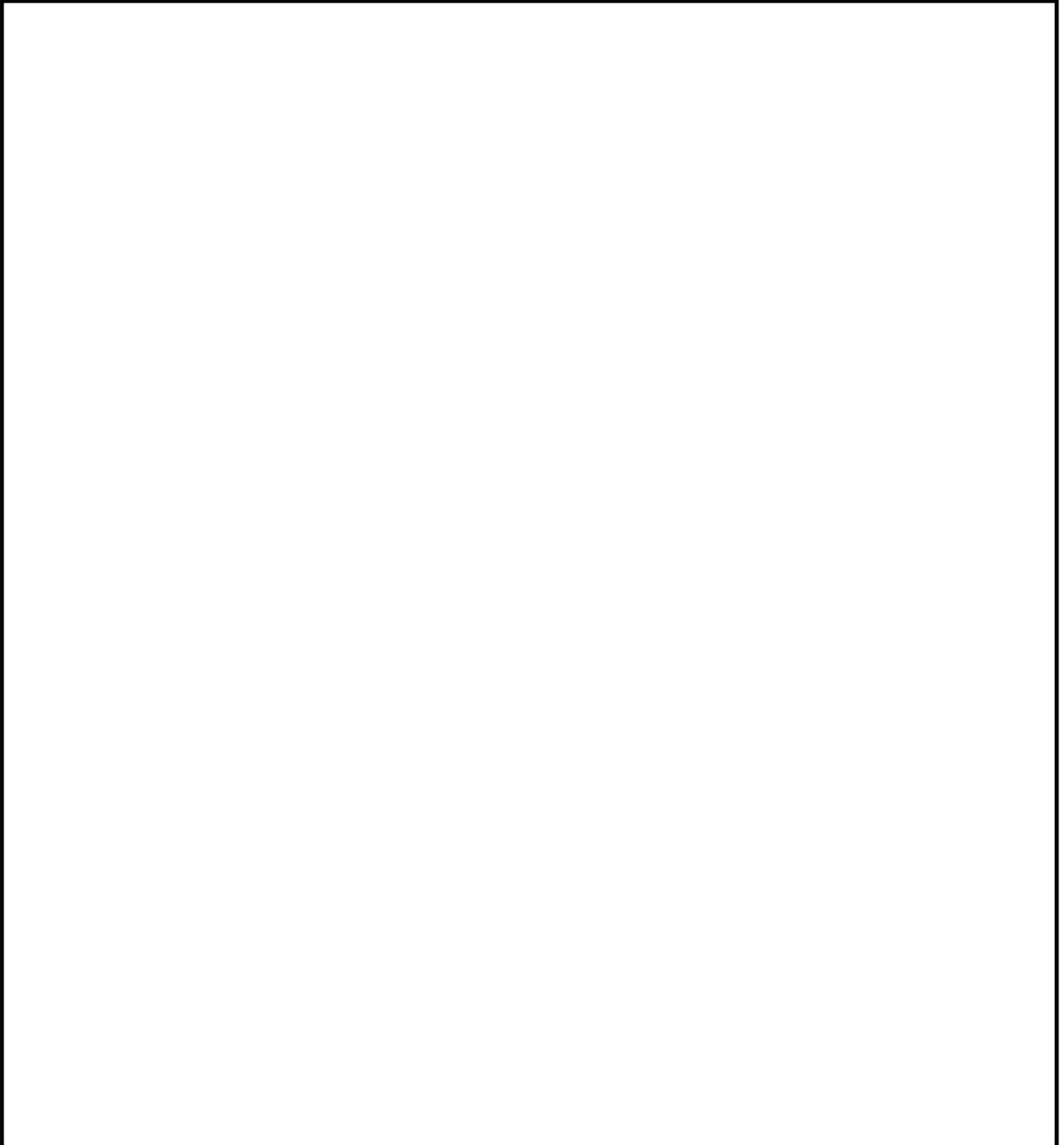
What is bonding / fusing ?

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Sketch and annotate a step by step of how to produce a bonded / fused sample fabric.

## TASK 4 Initial Design Ideas

Sketch out several design ideas for an item of clothing using recycled / upcycled fabrics. Must be coloured and annotated.



What do other people think about your designs? Ask your friends & family to write a comment in the space below.

Good points

Things you could change

## TASK 5 Final Design

Take the ideas from your initial ideas to produce a final design—must be coloured and Annotated and state where you are getting the fabrics from.

Explain here why you think this design would be good.

