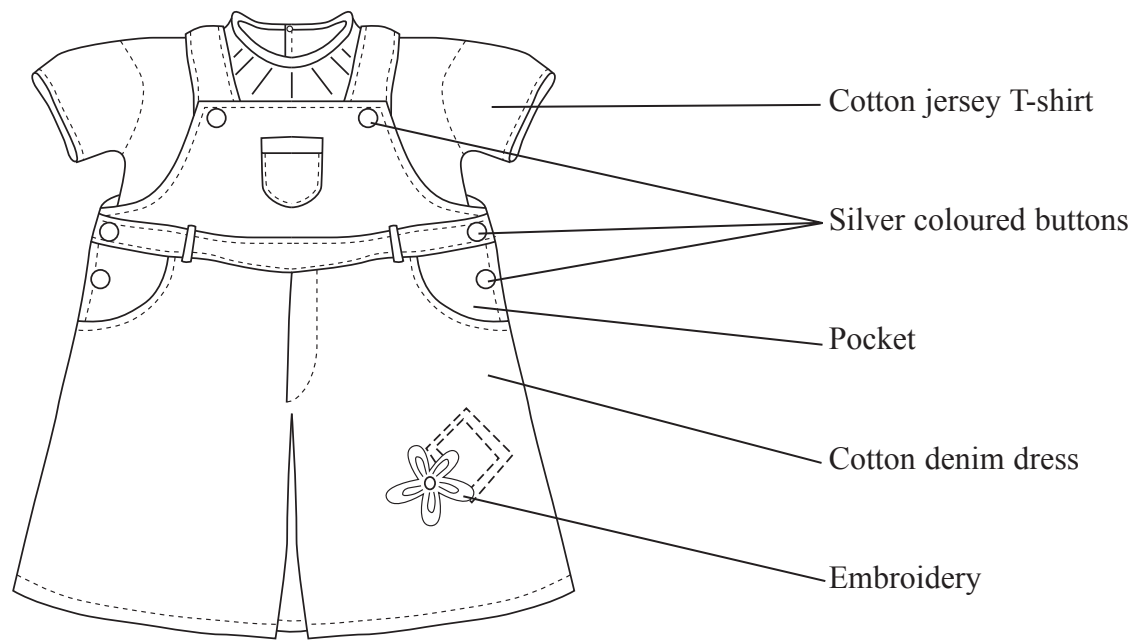




Answer ALL the questions. Write your answers in the spaces provided.

1. The drawing below shows details of a dress and T-shirt to fit a 12- to 18-month-old child.  
The dress and T-shirt is produced for sale in supermarkets.



(a) Two specification points for the dress and T-shirt are that they must:

- be comfortable to wear
- provide easy access for nappy changing or toileting

Under each of the following headings, give **one** more point that should be included in the specification for the dress and T-shirt.

For each point, give **one** reason why it should be included.

**Market**

Point .....

Reason .....

.....

.....

**Environment**

Point .....

Reason .....

.....

.....



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blank

**Quality**

Point .....

Reason .....

.....

.....

**(6)**

(b) The T-shirt is made from 96% cotton jersey and 4% elastane.

One reason why the T-shirt is made from cotton jersey with elastane is that it can be assembled using an overlocker.

(i) Give **two** other reasons why cotton jersey with elastane is a suitable material for the T-shirt.

1 .....

2 .....

**(2)**

(ii) Give **two** reasons why overlocking is a suitable process to manufacture the T-shirt.

1 .....

2 .....

**(2)**

(c) The dress is made from a cotton denim fabric.

Give **two** properties of cotton denim that make it suitable for the dress.

For each property give **one** reason why it makes cotton denim suitable.

Property 1 .....

Reason .....

.....

Property 2 .....

Reason .....

.....

**(4)**



Leave blank

(d) The buttons are silver coloured.

Explain **one** reason why the buttons are silver coloured.

.....

.....

(2)

(e) The embroidery on the dress is created using a CNC embroidery machine.

Explain **one** reason why a CNC embroidery machine is used for creating the embroidery.

.....

.....

(2)

(f) Two purposes of the dress and T-shirt are that they must:

- be comfortable to wear
- provide easy access for nappy changing or toileting

Explain, under the following headings, how the dress and T-shirt achieve these purposes.

(i) Be comfortable to wear.

.....

.....

.....

.....

(2)

(ii) Provide easy access for nappy changing or toileting.

.....

.....

.....

.....

(2)

(Total 22 marks)

Q1



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5  
**Turn over**

2. Fabrics can be made by weaving fibres together in a variety of different ways.

(a) Name the non-fraying edge of woven fabric.

.....  
(1)

(b) Name **two** different weaves and give an example of a fabric that is made from each.

	Weave	Fabric
1		
2		

(4)

(c) Woven fabrics are very suitable for making patchwork.

State **two** important points to consider when choosing fabrics for patchwork.

1 .....

2 .....

(2)

(d) Digital printers have improved the production of printed fabrics.

Describe **two** ways in which digital printing is an improvement on conventional printing processes.

1 .....

.....

2 .....

.....

(4)



Leave  
blank

(e) Textile products can be manufactured using one-off, batch or high volume production methods.

(i) Name **one type** of textile product that would be made using the one-off method.

.....  
(1)

(ii) Name **two** textile products that would be made using high volume production methods.

1 .....

2 .....

(2)

(f) CAD is used in batch production for pattern making, grading and lay planning.

Explain **one** advantage of using CAD in textiles production, for each of the following.

(i) Modifying existing pattern pieces.

.....

.....

(2)

(ii) Grading pattern pieces for different sizes.

.....

.....

(2)

(iii) Lay planning to fit all the pattern pieces onto the fabric.

.....

.....

(2)

(g) ICT is used in volume production to assist in ensuring high quality.

Explain **one** way ICT can assist in ensuring that high quality textile products are manufactured.

.....

.....

(2)

(Total 22 marks)

Q2

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3. A company is designing a bag for carrying sports equipment.

The specification of the sports bag is that it must:

- be able to carry dirty trainers and sports clothes separately
- open easily and close securely
- have a sporting logo suitable for production with a CNC machine
- be made using fabrics and processes suitable for batch production

(a) In the spaces opposite, use sketches, and where necessary, brief notes to show **two different** design ideas for the sports bag which meet this specification.

**Do not** evaluate your design in part (a).

Candidates are reminded that if pencil is used for diagrams/sketches that it must be dark (HB or B). Coloured pens, pencils and highlighter pens must **not** be used.

Please do not write in the space below. Please write your answers in the spaces provided opposite.







Leave blank

(b) Three of the original specification points are repeated below.

Evaluate how **one** of your design ideas succeeds or fails to meet each of these specification points.

Write the number of your chosen design idea (1 or 2) here .....

(i) The sports bag must be able to carry dirty trainers and sports clothes separately.

.....  
.....  
.....  
.....

(2)

(ii) The sports bag must have a sporting logo suitable for production with a CNC machine.

.....  
.....  
.....  
.....

(2)

(iii) The sports bag must be made using fabrics and processes suitable for batch production.

.....  
.....  
.....  
.....

(2)

(Total 22 marks)

Q3

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4. (a) Silk is a relatively expensive natural filament fibre.

(i) Give **two** properties of silk that make it suitable for evening wear.

1 .....

2 .....

(2)

(ii) Filament fibres can also be manufactured.

Describe **one** characteristic of filament fibres.

.....

.....

(2)

(b) Natural fibres are sometimes blended to make yarns.

Give **one** reason for making blended yarns.

.....

.....

(1)

(c) Durability is a property of some fabrics.

Use sketches and notes to show how a durability test would be carried out in school.

(4)



(d) Kevlar is often used for firefighters' uniforms.

Give **two** functional properties of Kevlar that make it suitable for firefighters' uniforms.

1 .....

2 .....

(2)

(e) New technology has allowed us to develop smart fabrics that change colour in response to heat or light.

Give **two** different uses for colour changing smart fabrics.  
For each use give **one** reason for colour change being an advantage.

1 .....

Reason .....

.....

2 .....

Reason .....

.....

(4)

(f) Synthetic microfibres can be used to make sports clothing.

Give **two** advantages and **one** disadvantage to the consumer of clothes made from synthetic microfibres.

Advantages

1 .....

2 .....

Disadvantage

1 .....

(3)



Leave  
blank

(g) Textile production has an impact upon the environment.

Describe **two** ways in which manufacturers can reduce the environmental impact of their textile production methods.

1 .....

.....

2 .....

.....

(4)

Q4

(Total 22 marks)

**TOTAL FOR PAPER: 88 MARKS**

**END**



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