



**GCSE**

**3602U10-1**

**MONDAY, 19 JUNE 2023 – MORNING**

**DESIGN AND TECHNOLOGY**

**Unit 1**

**FASHION AND TEXTILES**

**2 hours plus your additional time allowance**

**Surname** \_\_\_\_\_

**First name(s)** \_\_\_\_\_

**Centre Number** \_\_\_\_\_

**Candidate Number** 0 \_\_\_\_\_

**For Examiner's use only**

| <b>Question</b> | <b>Maximum Mark</b> | <b>Mark Awarded</b> |
|-----------------|---------------------|---------------------|
| <b>1.</b>       | <b>10</b>           |                     |
| <b>2.</b>       | <b>10</b>           |                     |
| <b>3.</b>       | <b>15</b>           |                     |
| <b>4.</b>       | <b>20</b>           |                     |
| <b>5.</b>       | <b>20</b>           |                     |
| <b>6.</b>       | <b>25</b>           |                     |
| <b>Total</b>    | <b>100</b>          |                     |

**ADDITIONAL MATERIALS**

**In addition to this examination paper, you will need a calculator.**

**INSTRUCTIONS TO CANDIDATES**

**Use black ink, black ball-point pen or your usual method.**

**Write your name, centre number and candidate number in the spaces provided on the front cover.**

**Answer ALL questions.**

**Write your answers in the spaces provided in this booklet. If you run out of space, use the continuation page at the back of the booklet, taking care to number the question(s) correctly.**

**INFORMATION FOR CANDIDATES**

**The number of marks is given in brackets at the end of each question or part-question. You are advised to divide your time accordingly.**

**The total number of marks available is 100.**

**You are reminded of the need for good English and orderly, clear presentation in your answers.**

**The quality of your written communication, including appropriate use of punctuation and grammar, will be assessed in your answer to question 4(d).**



**Name of fibre:**

\_\_\_\_\_



**Name of fibre:**

\_\_\_\_\_



**Name of fibre:**

\_\_\_\_\_



1 (b) Bamboo fibre is increasingly used in the manufacture of clothing.

State ONE property of bamboo and explain what makes it suitable for clothes.

Property: \_\_\_\_\_

\_\_\_\_\_

[1 mark]

Explanation: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



[2 marks]

1 (c) Fibres are spun in different ways to make them into usable yarns.

Underline the correct name for the textured yarn shown below: [1 mark]

chenille / bouclé



| <b>Product</b>   | <b>Scale of production</b>  |
|--|---|
| <p><b>Thermal cool bag</b></p>  | <p><b>Batch production:</b></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p><b>[2 marks]</b></p>  |
| <p><b>T-shirt</b></p>       | <p><b>Mass production:</b></p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <p><b>[2 marks]</b></p> |

**2. Fashion and textile products are manufactured using different scales of production.**

**(a) (i) Explain why the products shown opposite would be manufactured using the stated scale of production.**

**(ii) Standard stock components are used in the manufacture of fashion and textile products. Explain why this is beneficial to the manufacturer.**

**[2 marks]**

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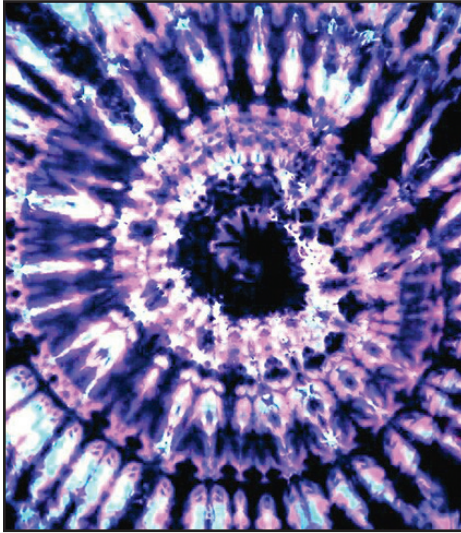
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**Tie and dye**



**Explanation:**

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**[2 marks]**

**Stencilling**



**Explanation:**

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**[2 marks]**

- 3. Fashion and textile products can be embellished using a variety of techniques and processes.**
- (a) Complete the table opposite by briefly explaining the following processes.**



**3 (b) The make-up bag shown opposite has a ‘sheep’ appliqué design on the front.**

**(i) Before stitching the sheep appliqué design in place on the make-up bag, the fabric for the sheep would have been reinforced.**

**Explain why this is necessary. [3 marks]**

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**Close-up of blue bound edge**

**4. The polyester fleece gilet shown opposite is suitable for use in cooler months. The fleece fabric has been made from recycled plastic bottles.**

**(a) (i) The neckline, armholes and front edge have a contrasting blue binding to finish the edges of the fleece gilet, as shown opposite.**

**Explain why this is a suitable finish for the fleece fabric. [2 marks]**

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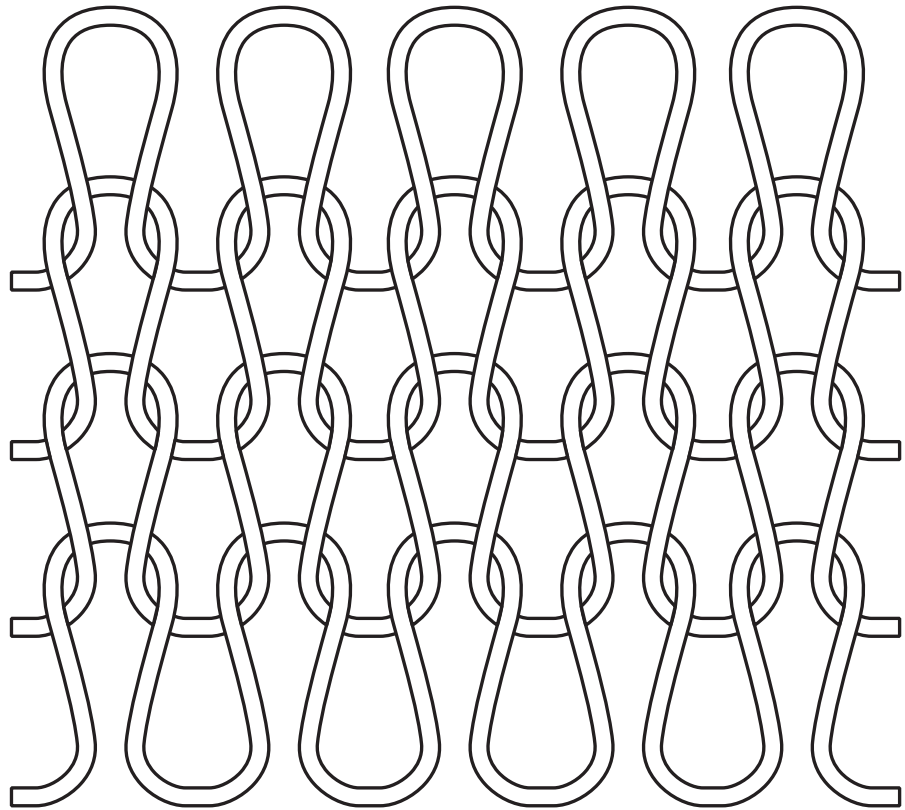
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**4 (a) (ii)**

**Using notes and sketches, show how a binding could be attached to the edge of the fabric.**

**[3 marks]**

**Note: a simple annotated cross section could be used.**



**4 (b) The fleece fabric is a knitted construction.**

**(i) State the type of knitted construction shown in the diagram opposite. [1 marks]**

**Knitted construction type:**

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4 (b) (ii)

Describe, in detail, two advantages to the user of wearing a gilet made from the knitted fabric.

Advantage 1: \_\_\_\_\_

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[2 marks]

Advantage 2: \_\_\_\_\_

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[2 marks]

(Turn over)





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← Colour palette

5. The colour palette shown opposite was inspired by nature.

(a) (i) Underline the correct term for taking inspiration from nature. [1 mark]

biometrics

biomimicry

biodiversity

(ii) Name TWO other sources designers could use to gain inspiration. 2 × [1 mark]

Source 1: \_\_\_\_\_

\_\_\_\_\_

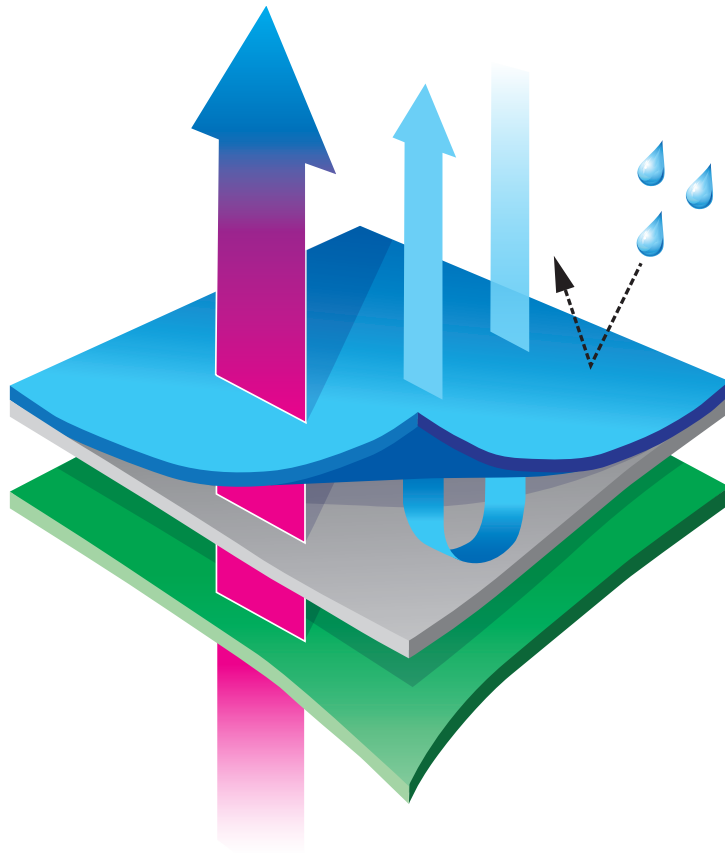
Source 2: \_\_\_\_\_

\_\_\_\_\_









- **Hydrophilic membrane**
- **Wind and rain are repelled**
- **Water vapour (sweat) can pass through**
- **External fabric**



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**Style detail A**

**Style detail B**

6. Study the picture opposite which shows a young girl's summer dress.

(a) (i) Underline the correct term from the lists provided for each of the style details labelled **A** and **B**.

2 × [1 mark]

Style detail **A**:

boat neckline

round neckline

U neckline

Style detail **B**:

sleeveless

cap sleeve

short sleeve

(Turn over)

**6 (a) (ii)**

**A series of small pleats have been placed on the waist of the dress.**

**Explain the purpose of the pleats. [2 marks]**

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**6 (a) (iii)**

**Using notes and a sketch, explain how a pleat is formed. [3 marks]**

**6 (a) (iv)**

**Describe a suitable method for finishing the hemline. [2 marks]**

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**6 (b) The designer has decided to enhance the flower print on the bodice of the summer dress, by machine embroidering over it using thermochromic threads.**

**(i) Complete the following sentence: 2 × [1 mark]**

**Thermochromic dyes change \_\_\_\_\_**

**in response to a \_\_\_\_\_**

**(ii) Describe a functional reason for using thermochromic threads on the dress. [2 marks]**

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**6 (b) (iii)**

**The cotton fabric for the dress has a mercerised finish. Discuss the process of mercerisation and how it affects the aesthetic qualities of the fabric.**

**[3 marks]**

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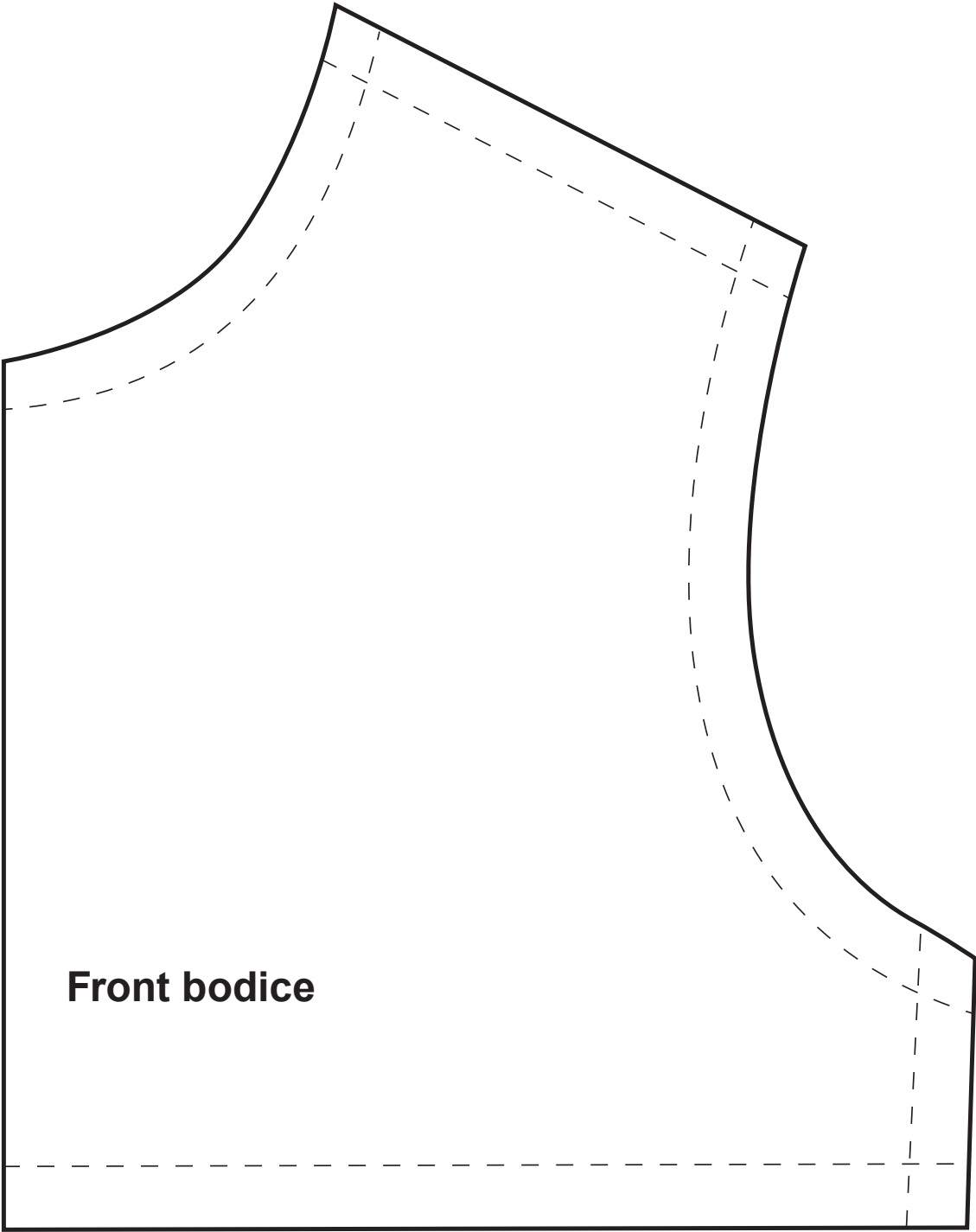
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**(Turn over)**



**Front bodice**

**6 (c) The front bodice template for the summer dress is shown opposite.**

**(i) On the diagram opposite, draw the pattern mark in the correct position to indicate that the template needs to be cut on the fold. 2 × [1 mark]**

**Marks will be awarded for the correct pattern mark and the correct placement of the mark.**

**(ii) Explain the purpose of the broken lines as indicated on the template. [2 marks]**

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**END OF PAPER**

**(Turn over)**



