

Please write clearly in block capitals.

Centre number

Candidate number

Surname \_\_\_\_\_

Forename(s) \_\_\_\_\_

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I declare this is my own work.

# A-level

## DESIGN AND TECHNOLOGY: FASHION AND TEXTILES

Paper 2 Designing and Making Principles

Time allowed: 1 hour 30 minutes

### Materials

For this paper you must have:

- normal writing and drawing instruments
- a scientific calculator.

### Instructions

- Use black ink or black ball-point pen. Use pencil only for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

### Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- There are 30 marks for **Section A** and 50 marks for **Section B**.

For Examiner's Use	
Question	Mark
1	
2	
3	
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5	
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8	
9	
10	
11	
<b>TOTAL</b>	



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0 2

**Section A – Product Analysis**

Answer **all** questions in this section.

**0 1**

**Figure 1**

**Trims, pleats and decorative fabric on the bodice of a special occasion dress**



Analyse the use of trims, pleats and decorative fabric shown in **Figure 1** and evaluate their suitability for a special occasion dress.

**[6 marks]**

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**6**

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0 2 . 1

**Figure 2**  
**1920s Football kit**



**Figure 3**  
**2020s Football kit**



Analyse the **style** of the football kits in **Figure 2** and **Figure 3** and evaluate their suitability for sportswear.

[6 marks]

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Question 2 continues on the next page



**0 2 . 2**

The football kits have the following fibre content:

Figure 2	
Jumper	100% wool
Socks	
Shorts	100% cotton

Figure 3	
Top	71% nylon 26% polyester 3% elastane
Socks	
Shorts	

Compare and contrast the performance characteristics of the **fibres** used in the football kits in **Figure 2** and **Figure 3**.

[6 marks]

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**Section B – Design and Commercial Manufacture**

Answer **all** questions in this section.

**0 3 . 1**

Give **three** different fabric performance tests for furnishing fabric.

**[3 marks]**

Test 1 \_\_\_\_\_

\_\_\_\_\_

Test 2 \_\_\_\_\_

\_\_\_\_\_

Test 3 \_\_\_\_\_

\_\_\_\_\_

**0 3 . 2**

Explain why furnishing fabric is tested in different ways before its use in public places.

**[6 marks]**

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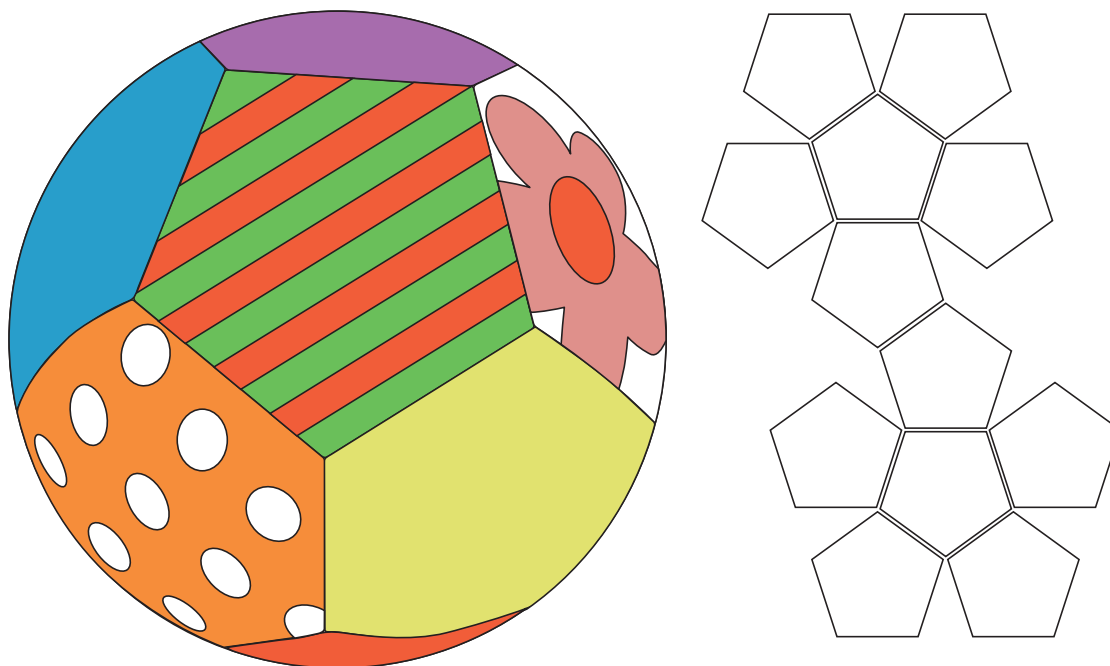
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0 4 . 1

Figure 4

Fabric ball and arrangement of pentagons to make the ball



The ball in **Figure 4** is made from 12 separate regular pentagons stitched together.

Each join of two pentagons requires 94 mm of thread.

Calculate how much thread is needed to make the ball.

[2 marks]

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Answer \_\_\_\_\_ mm

0 4 . 2

In a sample of 40 balls, **seven** have faulty stitching.

Calculate the probability of **one** ball in the sample, picked at random, having faulty stitching.

Give your answer to **two** decimal places.

[2 marks]

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Answer \_\_\_\_\_



0 4 . 3

The manufacturer has been asked to make a larger ball.

The small ball requires 15 g of stuffing.

The large ball requires 17% more stuffing than the small ball.

Calculate the total amount of stuffing required for a batch of 12 000 large balls.

[2 marks]

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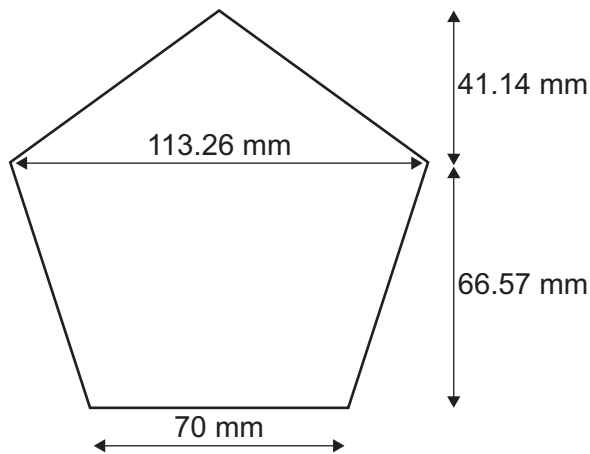
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Answer \_\_\_\_\_ g

0 4 . 4

Figure 5

Pentagon



Calculate the area of the pentagon in Figure 5.

[4 marks]

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Answer \_\_\_\_\_ mm<sup>2</sup>

10

Turn over ►



0	5
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Outline **three** ways that designers and manufacturers of children's soft toys can meet health and safety standards.

**[3 marks]**

1 \_\_\_\_\_

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3 \_\_\_\_\_

\_\_\_\_\_

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Fashions have a limited life span from new style to outdated look.

Identify and explain the stages in a product life cycle.

**[6 marks]**

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6

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Give **two** principles of Total Quality Management (TQM).

**[2 marks]**

1 \_\_\_\_\_

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2 \_\_\_\_\_

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2





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State what is meant by the term upcycling.

**[1 mark]**

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1

1	1
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Give **two** environmental benefits of making garments from fully fashioned knitted panels.**[2 marks]**

Benefit 1 \_\_\_\_\_

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Benefit 2 \_\_\_\_\_

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2

**END OF QUESTIONS**



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