



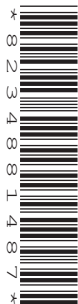
Oxford Cambridge and RSA

Friday 15 October 2021 – Morning

**A Level in Design and Technology:
Fashion and Textiles**

H405/02 Problem Solving in Fashion and Textiles

Time allowed: 1 hour 45 minutes



You must have:

- the Resource Booklet

You can use:

- a ruler (cm/mm)
- a scientific calculator
- geometrical instruments



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. You can use extra paper if you need to, but you must clearly show your candidate number, the centre number and the question numbers.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for a correct method, even if your answer is wrong.
- Each question tells you which part of the Resource Booklet to refer to.

INFORMATION

- The total mark for this paper is **70**.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document has **16** pages.

ADVICE

- Read each question carefully before you start your answer.

1 There are a wide range of products available on the market to meet the requirements of employees in the food preparation sector.

Refer to information on **pages 2 and 3** of the Resource Booklet.

[8]

[illegible]

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- 2*** As identified on **page 3** of the Resource Booklet, the basic structure of the traditional chef jacket has remained largely unchanged for the last century.

Some designers have updated the style to make it more suitable to meet modern day requirements and standards.

The designers working for 'La Cucina' need to consider the viability of existing solutions in order to develop a product that will meet the primary user feedback as shown in **Fig. 2** of the Resource Booklet.

Compare and contrast the suitability of the existing products shown in **Fig. 3** of the Resource Booklet in meeting this primary user feedback.

Refer to information on **pages 3 and 4** of the Resource Booklet.

[12]

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- 3 **Fig. 4** of the Resource Booklet shows a concept chef jacket idea presented by a designer at La Cucina to help resolve issues that have been highlighted by the primary user. The designer has retained the successful elements of the iconic chef jacket but has created a removable and reversible bib.

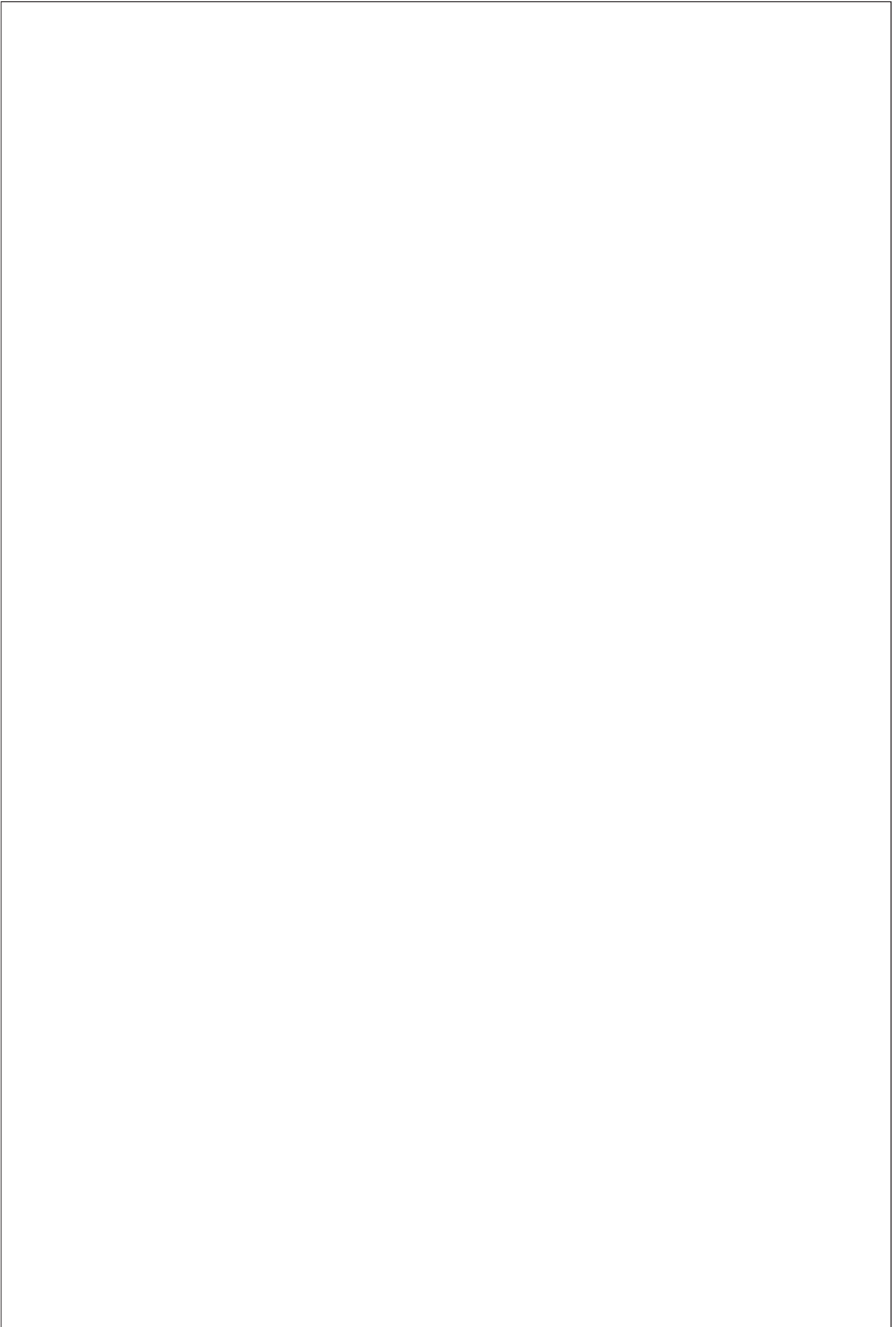
Use sketches and/or notes to show suitable methods of industrial manufacture and assembly for the removable and reversible bib.

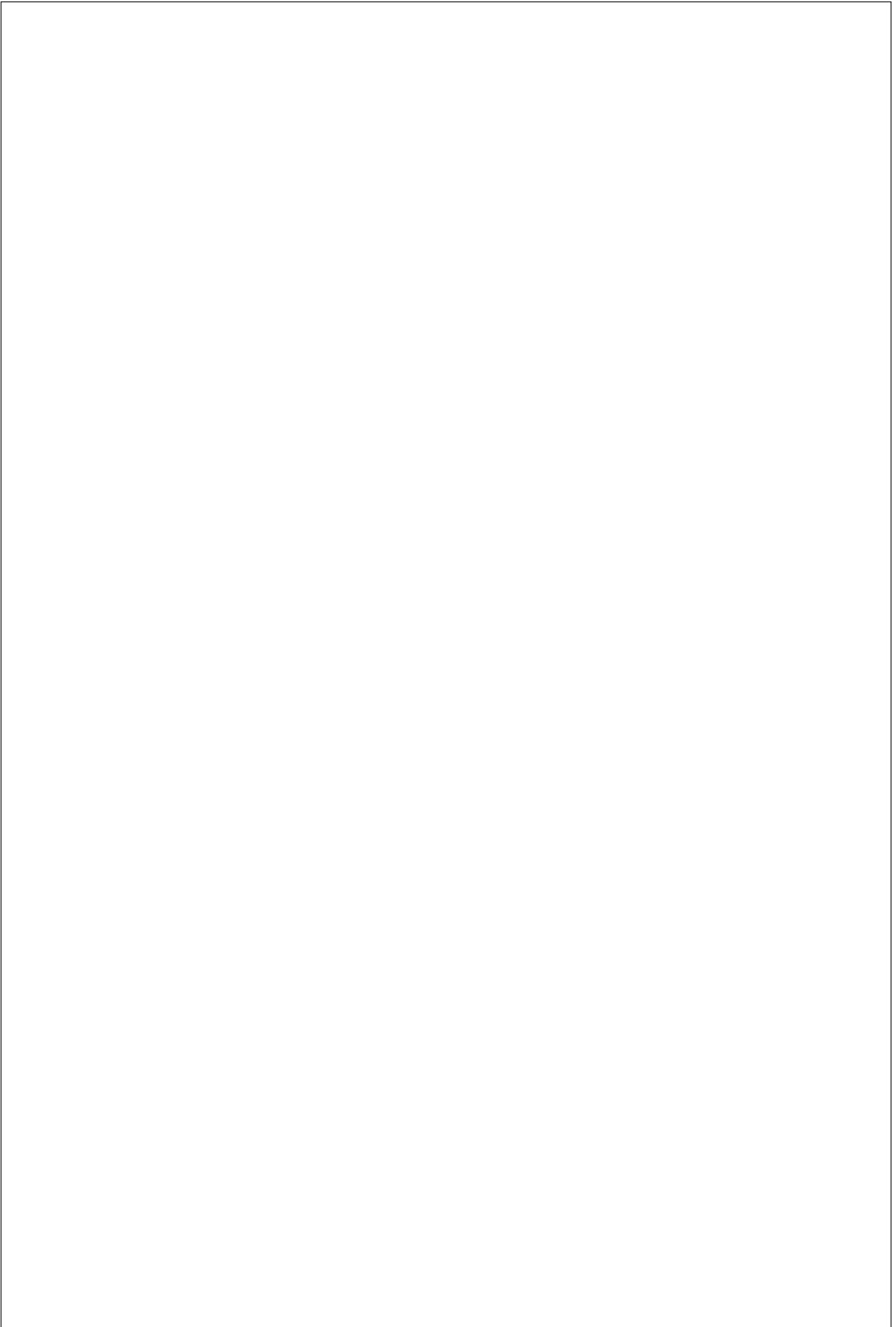
Your answer **must** consider all parts of the removable and reversible bib and include:

- pattern templates and markings
- construction techniques
- tools and equipment
- finishing.

Refer to information on **page 5** of the Resource Booklet.

[16]





- 4* Following the emerging trend for veganism and sustainable living, La Cucina has decided to produce a range of clothing and accessories for the hospitality industry that will satisfy these trends.

Fig. 5 illustrates the concept ideas that the designers have produced.

Critically examine how La Cucina can take these concept ideas forward and meet its mission statement on **page 7** of the Resource Booklet.

Your answer **must** include reference to sustainable:

- materials/components
- manufacturing techniques.

Refer to information on **pages 6 and 7** of the Resource Booklet.

[12]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- 5 The vinyl manufacturer is considering how the chosen circular logo will fit on its existing vinyl lay plan as shown in **Fig. 7** of the Resource Booklet.

The vinyl lay plan represents a vinyl sheet 45 cm by 45 cm.

When the chosen circular logo is laid out on the vinyl sheet there is a gap of 1.5 cm from the edge of the sheet and a gap of 1.5 cm between each circular logo.

Use the vinyl lay plan as shown in **Fig. 7** of the Resource Booklet to calculate the total amount of vinyl wastage that will be generated from producing a batch of 16 circular logos. Give your answer in cm^2 to 2 decimal places. Show your working.

Refer to information on **page 7** of the Resource Booklet.

Total amount of vinyl wastage cm^2

[6]

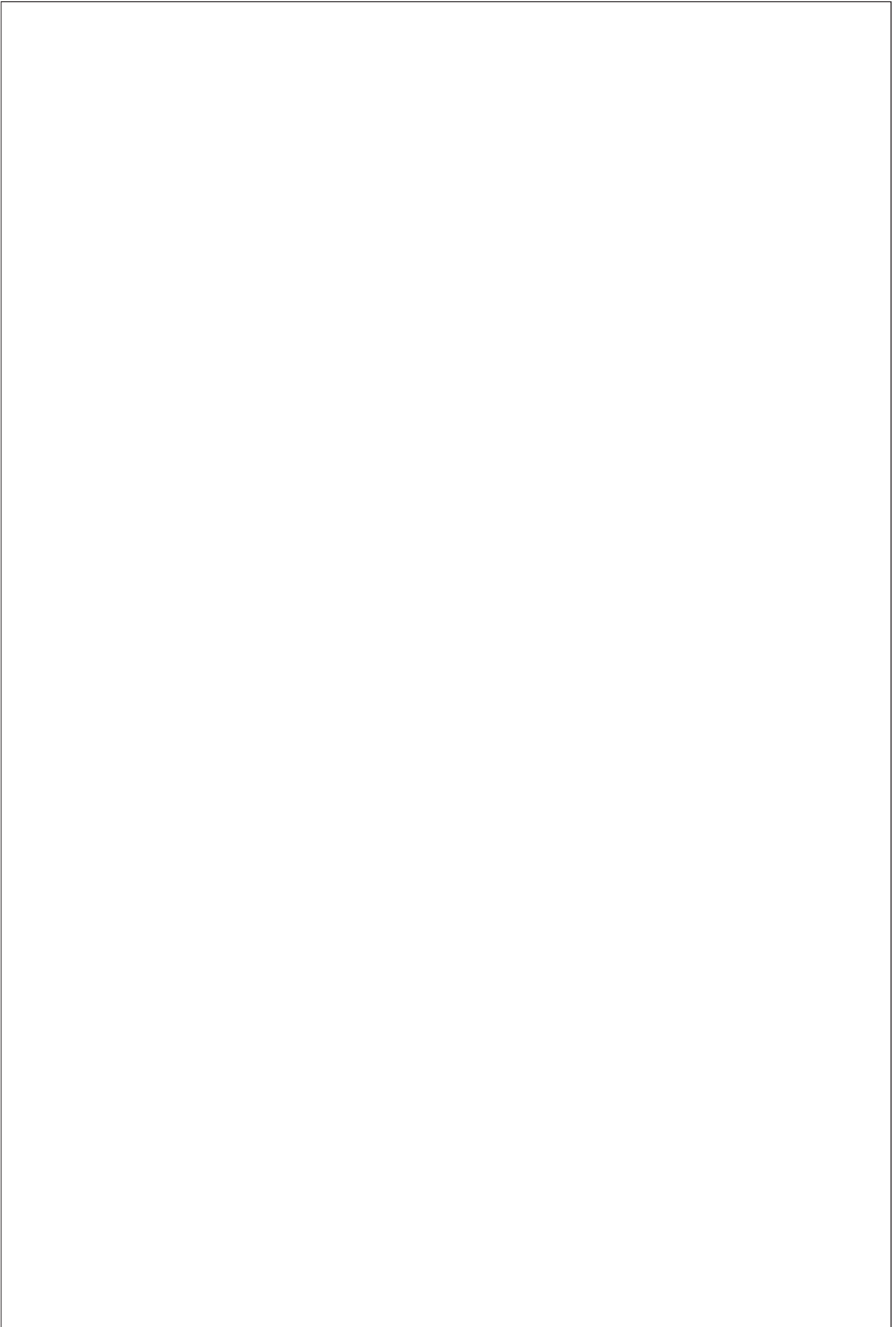
- 6 The research team at La Cucina has established the popularity of children role-playing adults at work as part of productive play acting. It has approached the designers and production team to present a version of the chef jacket that would be suitable for 3 to 8 year olds.

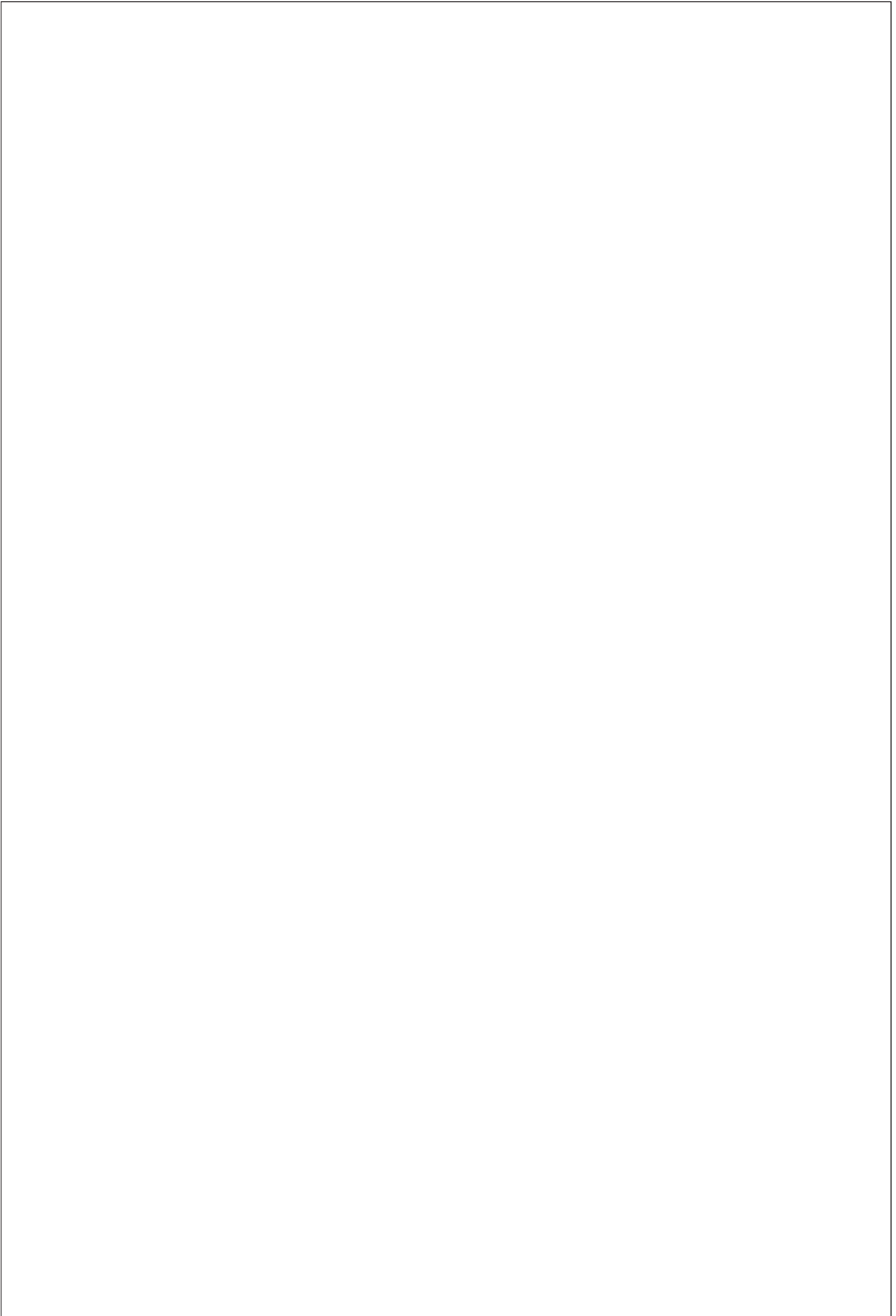
Taking into account the diagram of the concept children's chef jacket in **Fig. 8**, use sketches and/or notes to outline suitable methods of manufacture and assembly for the concept design.

Your answer **must** address the technical specification shown on **page 8** of the Resource Booklet.

Refer to information on **page 8** of the Resource Booklet.

[16]





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