



Cambridge International AS & A Level

CANDIDATE NAME

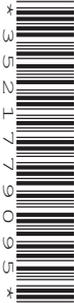


CENTRE NUMBER

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CANDIDATE NUMBER

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DESIGN & TECHNOLOGY

9705/33

Paper 3 A Level Written Paper

October/November 2025

2 hours 30 minutes

You must answer on the question paper.

You will need: Standard drawing equipment
Coloured pencils
Calculator

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You may use a pencil or coloured pencils for any sketches, drawings or rough working.
- You may use 30°/60° and 45° set squares, a pencil compass and templates/guides if appropriate for any sketches or drawings.

INFORMATION

- The total mark for this paper is 100.
- The number of marks for each question or part question is shown in brackets [].
- All dimensions are in millimetres, unless otherwise stated.

This document has **16** pages. Any blank pages are indicated.





Answer all questions.

1 Fig. 1.1 shows details of a money box.

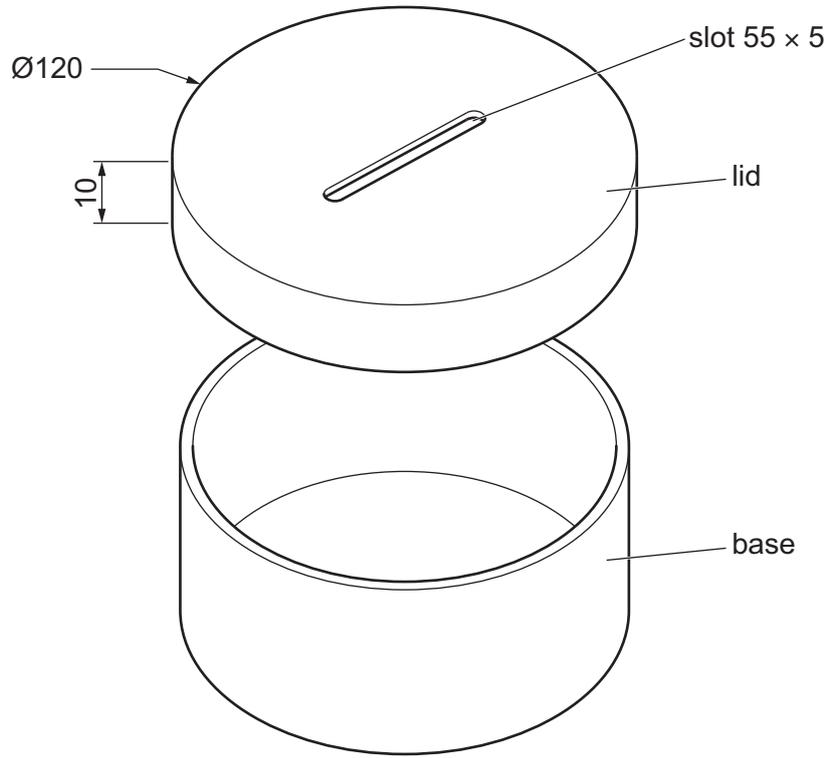


Fig. 1.1

(a) State a suitable material for the money box lid shown in Fig. 1.1.

Give **two** reasons to justify your choice.

Material

Reason 1

.....

Reason 2

.....

[3]





(b) Use sketches and notes to show how you would make **one** money box lid as shown in Fig. 1.1 in a school workshop.

In your response, you should give details of any tools and equipment you would use.

DO NOT WRITE IN THIS MARGIN





- (c) Use sketches and notes to describe the changes which may be necessary to the design, the manufacturing method and the material selected, to produce 500 identical money box lids.

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[8]





DO NOT WRITE IN THIS MARGIN

2 (a) Explain what is meant by the term work hardening.

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..... [2]

(b) Describe how additives are used to enhance the properties of polymers. Give **two** different examples.

1

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2

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..... [4]

(c) Use sketches and notes to show how a knock down (KD) fitting can be used on an item of furniture.

[4]





3 (a) Explain why injection moulding is unsuitable for producing a one-off component or product.

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..... [3]

(b) Explain **one** benefit for workers of a cell production manufacturing system.

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..... [3]

(c) Explain **two** ways in which the consumer can influence the design of products.

1

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2

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..... [4]

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Question 6 starts on page 10.



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6 A school for children aged 7–11 years requires a toy or puzzle for an after-school club.

The design specification states that the toy or puzzle must:

- be able to be used on a tabletop
- include movement of some form
- be manufactured as a batch of 10.

(a) Use sketches and notes to produce **two** different innovative ideas for the toy or puzzle.

(i) Idea 1

[6]



* 00080000011 *

DFD



(ii) Idea 2

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[6]





(b) Evaluate your **two** ideas for the toy or puzzle to select a final proposal for development. Justify your selection.

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..... [3]

DO NOT WRITE IN THIS MARGIN





- (c) Use sketches and notes to develop your chosen idea to show details of functions, materials, construction and finishes.

DO NOT WRITE IN THIS MARGIN





(d) Use a method of your own choice to draw the complete design solution.

Include key details and dimensions.

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