



Cambridge IGCSE™

DESIGN & TECHNOLOGY

0445/13

Paper 1 Product Design

October/November 2025

1 hour 15 minutes



You must answer on the two pre-printed A3 answer sheets.

You will need: Two A3 pre-printed answer sheets (enclosed)
Standard drawing equipment
Coloured pencils

INSTRUCTIONS

- Answer **one** question.
- Use an HB pencil for any drawings and a black or dark blue pen for any writing.
- Write your name, centre number and candidate number in the space on **both** pre-printed answer sheets.
- Answer in the space provided on the answer sheets.
- Do **not** use an erasable pen, staples, paper clips, glue or correction fluid.
- Do **not** write on any bar codes.
- You may use a calculator.
- You may use standard drawing equipment, including coloured pencils.
- At the end of the examination, hand in your named A3 answer sheets. Do **not** fasten them together and do **not** punch holes in the sheets or tie with string.

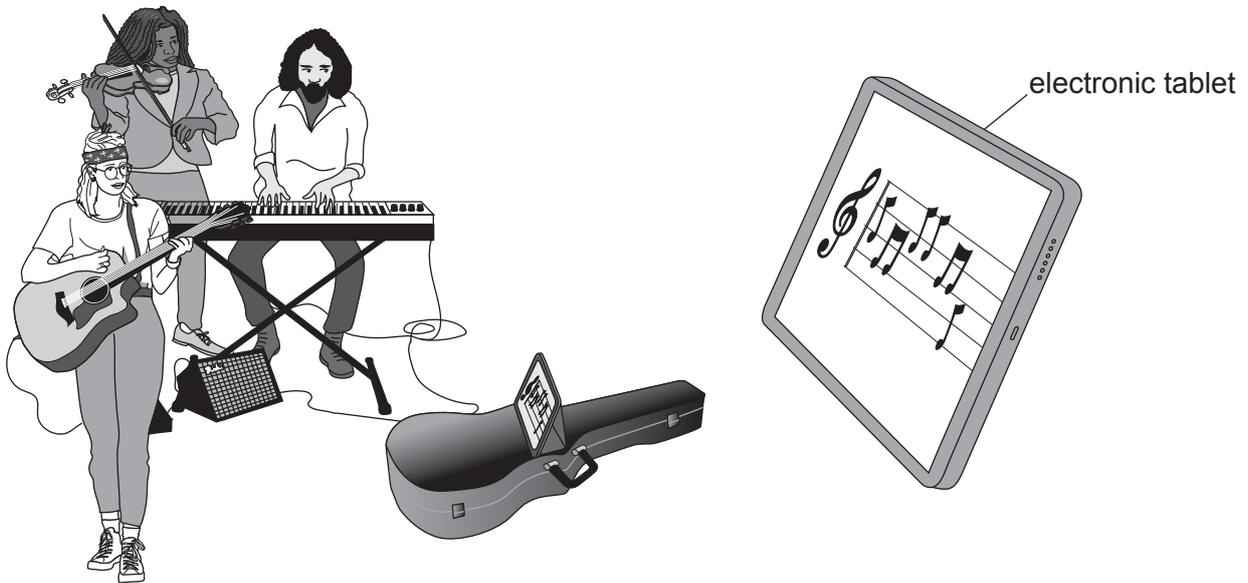
INFORMATION

- The total mark for this paper is 50.
- 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 4 pages.

Answer **one** question only on the A3 pre-printed answer sheets provided.

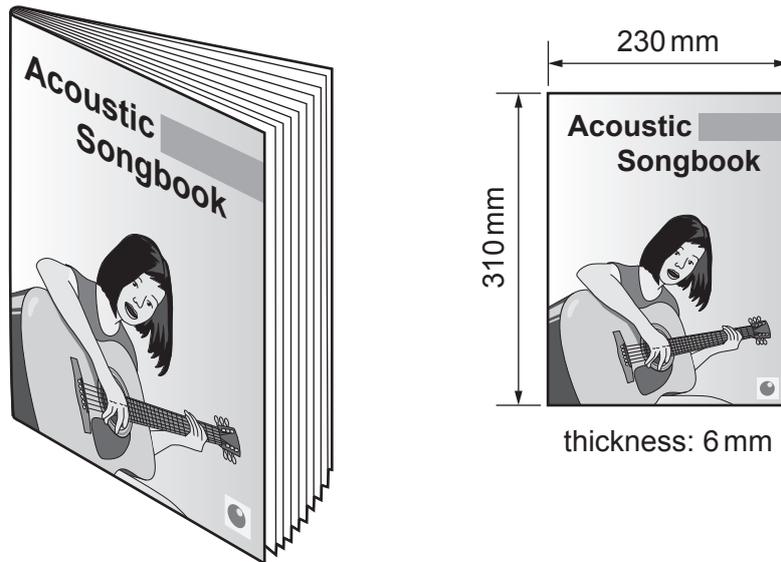
- 1 Musicians often use electronic tablets to read music while performing in outdoor public spaces.



Design a tablet holder that can be used during outdoor musical performances. The tablet holder must be height adjustable and reduce in size for transportation.

- (a) List **four** additional points about the function of such a product that you consider to be important. [4]
- (b) Use sketches and notes to show **two** methods of adding height adjustability to a product. [4]
- (c) Develop and sketch **three** separate ideas for the tablet holder. [12]
- (d) Evaluate your three ideas. Choose **one** idea to develop further and justify your choice. [8]
- (e) Draw, using a method of your own choice, a full solution to the design problem. Include construction details and important dimensions. [12]
- (f) Suggest **two** suitable specific materials for the solution you have drawn in part (e) and give reasons for your choice. [4]
- (g) Outline a method that could be used to manufacture **one** part of your solution drawn in part (e). Include the names of the tools used. [6]

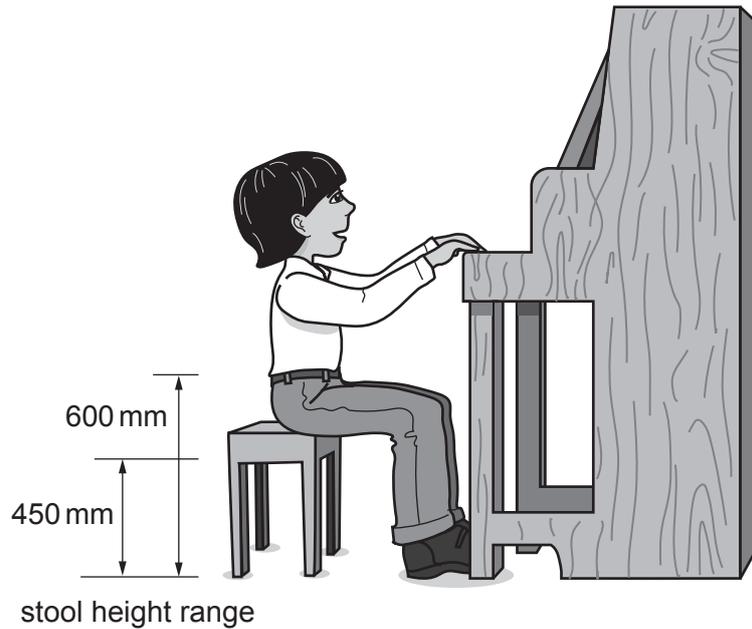
- 2 A music shop wishes to promote the sale of new songbooks.



Design a countertop point-of-sale display for **three** music songbooks. The design must fold flat and be assembled without the use of adhesives.

- (a) List **four** additional points about the function of such a point-of-sale display that you consider important. [4]
- (b) Use sketches and notes to show **two** methods of joining lightweight graphic materials without the use of adhesives. [4]
- (c) Develop and sketch **three** separate ideas for the point-of-sale display. [12]
- (d) Evaluate your three ideas. Choose **one** idea to develop further and justify your choice. [8]
- (e) Draw, using a method of your own choice, a full solution to the design problem. Include construction details and important dimensions. [12]
- (f) Suggest **two** suitable specific materials for the solution you have drawn in part (e) and give reasons for your choice. [4]
- (g) Outline a method that could be used to manufacture **one** part of your solution drawn in part (e). Include the names of the tools used. [6]

3 People of different sizes play the piano.



Design a seat that allows the height to be easily adjusted by the pianist without getting off the seat. The seat must adjust between the minimum and maximum heights shown.

- (a) List **four** additional points about the function of such a seat that you consider to be important. [4]
- (b) Use sketches and notes to show **two** mechanisms that will adjust the height of a surface. [4]
- (c) Develop and sketch **three** separate ideas for the height adjustable seat. [12]
- (d) Evaluate your three ideas. Choose **one** idea to develop further and justify your choice. [8]
- (e) Draw, using a method of your own choice, a full solution to the design problem. Include construction details and important dimensions. [12]
- (f) Suggest **two** suitable specific materials for the solution you have drawn in part (e) and give reasons for your choice. [4]
- (g) Outline a method that could be used to manufacture **one** part of your solution drawn in part (e). Include the names of the tools used. [6]

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