CAMBRIDGE
International Education

Cambridge O Level

CDT: DESIGN & COMMUNICATION **7048/01**

Paper 1 **October/November 2025**

MARK SCHEME

Maximum Mark: 80

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2025 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5: Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).
GENERIC MARKING PRINCIPLE 6: Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer	Marks	Guidance
Section A			
A1(a)(i)	**Side view** Rectangular/square shape drawn for leg [1] Correct size rectangle drawn for leg (50 mm × 55 mm) [1] Edge of seat added to overlay or candidate solution (2–3 mm) [1] **Front view** Rectangular/square shape drawn for back [1] Correct size rectangle drawn for back (50 mm × 100 mm) [1] Right leg drawn [1] Right leg correct to overlay (size and position) [1]	**7**	
A1(a)(ii)	Dimensions of the correct size added (±2 mm) Award if in cm. [1 × 2] At least one dimension added to the correct convention (limit lines with gap, dimension line, arrows and dimension above line) [1]	**3**	Award marks for an incorrect size that matches candidate drawing. For the award of a mark the dimension must match the length of the line.
A1(b)	Exemplar answer: To quickly see [1] what the product looks like three dimensionally (3D). [1]	**2**	Other acceptable answers: Quicker [1] than making the product. [1] Less expensive [1] than making the real product. [1] To consider the proportions [1] of the design. [1] To show to a client [1] before it is manufactured. [1]
A1(c)(i)	**Back** Rectangular/square back drawn [1] Rectangular back the correct size (50 mm × 100 mm) [1] Vertical right slot correct to overlay (size and position) [1] Horizontal slot - left or right side (size and position) [1] **Leg** Rectangular/square leg drawn [1] Rectangular leg the correct size (50 mm × 55 mm) [1]	**6**	

Question	Answer	Marks	Guidance
A1(c)(ii)	Cutting mat [1], safety mat [1], cutting board [1] *S*afety rule [1] metal rule [1], steel rule [1], steel straight edge [1], try square [1], engineer's square [1]	**2**	Accept alternative names for these pieces of equipment but **not** marking out tools such as pencil or rule or coping saw, hot wire cutter, laser cutter, protective gloves...
A1(d)	*Start* and correct shaped box added (award for ellipse to rectangle with rounded corners but **not** circle or rectangle/square) [1] *Slide the second leg into a slot in the back (and check both legs are correctly fitted)* or similar words in correct shape box added [1] Correct shape (diamond) drawn around decision text [1] Line and arrow from decision box to earlier stage [1] *No* and *Yes* added in appropriate positions [1] *End* and correct shape box added (award for ellipse to rectangle with rounded corners but **not** circle or rectangle/square) [1]	**6**	
A1(e)(i)	Exemplar answers: Show the main stages (steps) [1] Show the correct sequence [1]	**2**	AOVR include: Easy to follow/understand [1] Allows problems to be identified. [1] How to make the model [1]
A1(e)(ii)	Exemplar answer: Monochrome is cheaper than full colour printing [1] and makes it easier to follow the instructions [1]	**2**	AOVR include: Monochrome instructions are easier to follow [1] without the distraction of colour [1] Monochrome printing [1] is suitable for mass producing instructions [1] The additional cost [1] of colour printing cannot be justified [1] Award one mark for a clear understanding that monochrome means printing in a single colour. Second mark can be awarded if first mark is not awarded.

Question	Answer	Marks	Guidance
Section B			
B2(a)(i)	Base and back rectangles added [1] **or** base and back rectangles added of the correct sizes [2] At least **one** triangle added of the correct size, position and orientation [1] Cut and fold lines correctly shown (or to candidate solution) [1] At least one centre for a hole correctly added [1] Four centres correct to overlay [1]	**6**	
B2(a)(ii)	Isometric drawing [1] Corner bracket drawn [1] **or** corner bracket correct to overlay (must include at least **one** triangle) [2] Correct lining in (to overlay or candidate solution) [1] At least one centre for a hole correctly added [1] Four centres correct to overlay [1]	**6**	
B2(a)(iii)	Exemplar answers: Enhances the appearance [1] Shows the material [1]	**2**	AOVR include: Looks more realistic [1] To show texture [1] To show tone [1]
B2(b)	Hole drawn 16 mm wide (**not** circle) from top to bottom of plate [1] Countersink added (**not** sloping full height of hole) [1] **or** countersink added with three horizontal lines [2] Correct hatching (both halves the same direction hatching) [1]	**4**	

Question	Answer	Marks	Guidance
B2(c)	Exploded drawing [1] Some parts drawn [1] **or** all parts drawn (corner plate, shelf, side and screws) [2] High quality exploded sketch with all parts in appropriate positions [4] **or** Good quality exploded sketch with most parts in approximate positions [3] **or** Sketch with some parts in approximate positions [2] **or** Sketch with some parts shown (could be 2D) [1]	**7**	

Question	Answer	Marks	Guidance
B3(a)(i)	Fold line added in the correct position [1] Fold line correctly identified (dashed line or label) [1]	**2**	
B3(a)(ii)	Window added with a cut line (solid line) [1] Window of approximately the correct size and correct position [1]	**2**	
B3(b)	Outer shape of front completed [1] **or** in good proportion [2] Window added to front (of appropriate size and position) [1] Inside (back) surface completed and matches the front in terms of size [1]	**4**	
B3(c)	210 mm [1], 210 [1] 148 mm [1], 148 [1] 80 – 100 [1] Lithography [1] digital printing [1], ink jet [1] or laser printing [1] Die cutting [1], stamping [1], laser cutter [1] or press cutting [1]	**5**	Do **not** accept craft knife.

Question	Answer	Marks	Guidance
B3(d)	**Leaflet A** Outer shape drawn (height and width correct) [1] Two fold lines shown with correct convention or label in correct position to overlay [1] Centre part full height (to overlay or candidate solution) [1] Left and right parts slope down/up from centre (must be cut rather than fold lines at the top) [1] **Leaflet B** Outer shape drawn (height and width correct) [1] Two fold lines shown with correct convention or label in correct position to overlay [1] Left side with a hole to view the H [1] Right side only half the height (could be top or bottom but must be cut line) [1]	**8**	Accept solutions that see the open side as on the left or right, meaning slopes will be the opposite way round. Accept solutions that see the open side as on the left or right, as long as the H is visible.
B3(e)	Exemplar answers: Saves on the cost [1] of printing [1] Reduces waste [1] as no paper is used [1] Quicker to produce/edit [1] as changes just need to be made on a computer [1]	**4**	AOVR include: Better for the environment [1] as no trees cut down to make paper [1]

Question	Answer	Marks	Guidance
B4(a)	Major axis 180 mm [1] Minor axis 100 mm [1] Some construction shown [1] **or** clear construction shown [2] (could be any size ellipse) At least six points correctly plotted (could be any size ellipse) [1] Ellipse correct to overlay or candidate solution [1]	**6**	
B4(b)	The word HOOD used [1] Modification (could just be letters of the word hood) to lettering: High quality sketches and notes show a modification to the word HOOD that clearly shows the company produces flat packed furniture [3] **or** Good quality sketches and/or notes show a modification to the word HOOD that suggests the company produces flat packed furniture [2] **or** Sketch/es show a modification to the word HOOD [1]	**4**	
B4(c)	Exemplar answers: benefit: relatively cheap so less cost [1] to manufacture/purchaser [1], can be recycled [1] so environmentally friendly. drawbacks: not waterproof [1] so products cannot be left outside [1], only offers limited protection [1] so an impact will damage the product [1]	**4**	
B4(d)	Methods likely to be corrugations/corrugated card, honeycomb, pressed pulp High quality sketches and notes clearly describe a method by which cardboard can be formed to increase its strength [3] **or** Good quality sketches and/or notes suggest a method by which cardboard can be formed to increase its strength [2] **or** Sketch/es show a formed (shaped) piece of cardboard [1]	**3**	

Question	Answer	Marks	Guidance
B4(e)	Exemplar answers: Survey [1], questionnaire [1], mailshot [1], ask people [1], online survey [1] research online [1], market research [1], social media [1], interviewing [1], sales report [1], number of receipts [1]	**3**	
B4(f)	Circled drawn [1] At least two sectors correct [1] **or** all sectors the correct sizes [2] Correct sector extracted [1] Colour and labels enhance the pie chart [1]	**5**	