



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

DESIGN AND TECHNOLOGY

0445/22

Paper 2 Graphic Products

May/June 2017

MARK SCHEME

Maximum Mark: 50

Published

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This document consists of **4** printed pages.

Section A

Question	Answer	Marks
A1(a)	<p>End view Second wheel added [1] Second wheel correct [1] Two horizontal lines added [1] Two horizontal lines correct [1]</p> <p>Plan One mark for each line correctly projected down from the side view [1 × 2]</p>	6
A2(a)	<p>Paper fastener or similar fastening method drawn (must allow the strips to rotate) [1] Component correctly named e.g. paper fastener [1]</p>	2
A2(b)	<p>Arc drawn from Y – X [1] Arc drawn to show the second upright rotated to the horizontal position [1] At least three positions for A plotted [1] Path of point P correct [1]</p>	4
A3(a)	<p>Isometric axis used [1] Length [1] Height [1] <i>Side of car correct</i> [1] Any two wheels added [1] Wheels correct [1] <i>Thickness of foam board added</i> [1]</p> <p><i>Incorrect size drawings can score a maximum of 5 marks</i></p>	7
A3(b)	<p>Acceptable reasons include: Easy to cut [1] Rigid [1] Can draw windows on the side [1] One mark for each acceptable reason</p>	2
A3(c)	<p>Find – internet search engine (for example, Google) [1] and search instruction (for example, image of car) [1]</p> <p>Capture – right click on image [1] and copy (and paste) [1]</p> <p>Accept similar answers using different methods.</p>	4
	Total:	25

Question	Answer	Marks
B4(a)(i)	<p>Left triangle added [1] Left triangle correct [1]</p> <p>Right triangle added [1] Right triangle correct [1]</p> <p>Base triangle, attached to right triangle [1] Base triangle correct [1]</p> <p>Some evidence of fold lines and cut lines shown.[1] All fold lines and cut lines correct [1]</p>	8
B4(a)(ii)	<p>Glue tab added to the base triangle [1] Base glue tab correct [1] Two glue tabs added to the top of the development (net) [1] Side glue tab on RH sloping side [1]</p>	4
B4(a)(iii)	<p>ICE and Y added in any style [1] Consistent height for all letters [1] Consistent spacing for all letters [1]</p>	3
B4(b)	<p>Key stages include: <u>Lithography process</u> Original image Scanning Colour separation Printing plates CYMK Printing of colours Registration/alignment of colours</p> <p>Fully detailed description including most of the key stages [5 or 6] A description including some of the key stages [3 or 4] Limited details including one or two key stages [1 or 2]</p>	6
B4(c)	<p>Appropriate colour named (red) [1] Red is used because strawberries are red [1] Accept other colour choices that are justified</p>	2
B4(d)	<p>Any symbol drawn [1] Symbol correctly named (recycling, put wrapper in bin...) [1]</p>	2
	Total:	25

Question	Answer	Marks
B5(a)	a. Right side completed by adding a vertical [1] b. Right side longer than the given left side [1] c. Top completed by adding a line to VP1 [1] and a line to VP2 [1] Top strip added [1] Top strip added in good proportion and in perspective [1] Bottom strip added [1] Bottom strip added in good proportion and in perspective [1] Two diagonal lines added [1 × 2] Semi-circle added to front strip [1] Semi-circle added in perspective [1] Three inner detail lines added [1 × 3]	15
B5(b)	The clear plastic cover can be produced by vacuum forming or folding clear plastic sheet or fabrication. Example: Key Stages for Vacuum forming Naming the process (vacuum forming) Former Heat Suction Remove from mould Trim Fully detailed description including most of the key stages [5 or 6] A description including some of the key stages [3 or 4] Limited details including one or two key stages [1 or 2]	6
B5(c)	Semi circle added [1] Semi circle with a cut line [1] Two horizontal lines added [1] Evidence of rectangular hole in fold-down flap [1]	4
	Total:	25