

Design and Technology

General Certificate of Secondary Education **1955/02**
(Short Course) **1055/02**

Graphic Products

Mark Scheme for June 2010

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Tolerance + or -2mm on all questions

1	(a) 2D CAD has been ticked (selected)	1	[1]
	<i>No mark if more than one box has been ticked (selected) in (a)</i>		
	(b) Each appropriate reason 1 mark eg Does not have to be redrawn It is always the same Can be easily re-sized Changes can be easily made Can not get lost or damaged easily Easy to import into other designs	1 1	[2]
	(c) Appropriate method given eg memory card USB lead CD	1	[1]
	(d) Pointer tool selected Photograph highlighted (selected) Photograph dragged to correct size	1 1 1	[3]
	(e) Fill tool selected Red chosen from colour palette Cursor moved inside logo shape and clicked	1 1 1	[3]
		Total	[10]
2	(a) Card thickness 500 – 2000 microns OR 0.5 mm – 2 mm Appropriate reason related to the card being thick (rigid) enough to stand up and support the weight of the leaflets or thin enough to fold	1 1	[2]
	(b) Front drawn Sides drawn Back drawn Strut drawn	1 1 1 1	[4]
	<i>Must be a 3D view to gain the marks</i>		
	(c) Correct shaped hole cut out of sheet material Explanation of how hole could be cut out Explanation of how colour could be applied eg Spray paint At least two appropriate tools, pieces of equipment or materials named	1 1 1 1	[4]
		Total	[10]

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3	(a) Three layers of material shown	1
	At least one material correctly named. ie Card or Foam	1 [2]
	(b) Slots allow two parts to partially slot together	1
	Slots allow parts to fully slot together	1
	Slot(s) has a reasonable width (not just a single line or very wide)	1
	Correct method of assembly clearly communicated and explained	1 [4]
	(c) Base is an appropriate shape/size to provide stability	1
	Model would partially slot/fit into base	1
	Model fully slots/fits into base	1
	Appropriate method of assembly clearly communicated and explained	1 [4]
		Total [10]
4	(a) Isometric circle sketched in correct place	1
	<i>No mark if a true circle has been sketched</i>	
	Correct orientation of clock hands (12.15)	1 [2]
	<i>This mark can be given if hands are correctly orientated on a true circle</i>	
	(b) Some evidence of 2 tones of shading used (1 mark)	
	OR	
	Good quality tonal shading using at least 2 tones (2 marks)	2 [2]
	(c) Three sides and base correctly added within tolerance	1
	Two triangles correctly added within tolerance	1
	Sufficient glue tabs (8) to make model (can be any width)	1
	At least 2 fold lines and 2 glue flaps identified	1 [4]
	<i>Fold lines must use correct convention</i>	
	<i>Glue tabs could use a key or be labelled</i>	
	<i>No marks for freehand in part (c)</i>	
	(d) Part of model opens	1
	At least 2 appropriate fold in flaps shown which help to hold the opening section in place when closed	1 [2]
		Total [10]

5	(a)	(i)	Reciprocating	1	
		(ii)	Oscillating	1	[2]
	(b)	Linkage is only made from strips of card		1	
		Linkage is joined by pivots		1	
		Linkage joins part A to both opening parts of the bridge		1	
		Linkage clearly works		1	[4]
	(c)	Key clearly identifies the two given fixed pivots		1	
		Key clearly identifies additional moveable pivots		1	[2]
	(d)	Appropriate component sketched		1	
		Appropriate component named		1	[2]
		eg Paper fastener			
		Eyelet			
		Click or ratchet rivet			
		Bifurcated rivet			

Total [10]

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