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## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**International General Certificate of Secondary Education** 

## MARK SCHEME for the May/June 2008 question paper

## 0445 DESIGN AND TECHNOLOGY

0445/01

Paper 1 (Design), maximum raw mark 50

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.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

• CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2008 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme	Syllabus	er
	IGCSE – May/June 2008	0445	5

1 (a) Accept any **four** suitable points – tools accessible, lightweight, easy to move, comfortable to carry, easy to store, etc. No repeats of question.

			10
(b)	Accept drawings of any <b>two</b> appropriate handles – holes, slots, additions, ledges, fixtures, etc.	2x2	[4]
(c)	Any suitable ideas. At least <b>three different</b> ideas for maximum marks. Pro rata if fewer. <b>Communication</b> Simple drawings displaying a low standard or limited range of techniques  Clear drawings displaying a good standard and a range of techniques – shading/colour/annotation etc.  High quality drawings using a wide range of techniques with clear annotation and detail <b>Suitability</b> Simplistic designs showing outlines only  Rather more detail, sensible solutions that could work  Accurate solutions, good fitness for purpose, detailed construction	0-2 3-4 5-6 0-2 3-4	[12]
	Accurate solutions, good littless for purpose, detailed construction	J <b>-</b> 0	[۱۷]
(d)	Evaluation of each of the ideas. At least 3 evaluations up to 2 marks each Selection and justification. (1+1)	0–6 2	[8]
(e)	Quality of drawing Poor line quality, proportions, little detail Good line work, use of colour, proportions, some detail High standard throughout with a range of techniques that show clearly all detail Dimensions 2 or 3 overall dimensions only – 1 Additional detail dimensions – 2	1 2–3 4	
	Construction details A simplistic approach showing little or no detail of construction to be used Most constructional detail may be obvious from overall views or with some annotation All constructional detail will be clear with good annotation and additional detail drawings as necessary	0–2 3–4 5–6	[12]
(f)	Suitable materials stated. Appropriate reasons for choice.	2 2	[4]
(g)	Suitable method stated. Detailed description of process, including: <b>processes</b> and <b>tools</b> .	1 3 2	[6]

[Total: 50}

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Pag	ge 3	Mark Scheme	Syllabus	er	
		IGCSE – May/June 2008	0445	3	
(a)		ny <b>four</b> suitable points – stable when opened, easy to transport, attract attention, etc. No repeat	easy to assemble, s of question.	Can	Bridge com
(b)	•	rawings of any <b>two</b> flexible methods – scored ots/tabs, etc.	l card, tape, plastic	2x2	[4] ·COM
(c)	Any suita if fewer.	ble ideas. At least <b>three different</b> ideas for maxin	num marks. Pro rata		
	Simple d	rawings displaying a low standard or limited range		0–2	
		awings displaying a good standard and a ran ing/colour/annotation etc.	ge of techniques –	3–4	
	• .	lity drawings using a wide range of techniques valetail	with clear annotation	5–6	
		designs showing outlines only		0–2	
		ore detail, sensible solutions that could work solutions, good fitness for purpose, detailed const	ruction	3–4 5–6	[12]
(d)		n of each of the ideas. At least 3 evaluations up to and justification. (1+1)	o 2 marks each	0–6 2	[8]
(e)	_	of drawing		4	
		quality, proportions, little detail work, use of colour, proportions, some detail		1 2–3	
		dard throughout with a range of techniques that shons 2 or 3 overall dimensions only – 1	now clearly all detail	4	
		Additional detail dimensions – 2		2	
	A simplis	ction details tic approach showing little or no detail of construct		0–2	
	anno	structional detail may be obvious from overall tation		3–4	
		ructional detail will be clear with good annotation ings as necessary	and additional detail	5–6	[12]
(f)		materials stated. ate reasons for choice.		2	[4]
	. Aproprie			-	r.1
(g)	Suitable	method stated.		1	
	Detailed and tools	description of process, including: <b>processes</b>		3 2	[6]
	and took	••		_	[~]

[Total: 50]

Page 4	Mark Scheme	Syllabus	er
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			4	1	
Pa	ge 4	Mark Scheme	Syllabus	S. 1	r
		IGCSE – May/June 2008	0445	200	
(a)		ny <b>four</b> suitable points – lightweight, easy to erectiamage clothes, correct height, etc. No repeats of c	et, easy to transport question.	aj.	hbridge.co.
(b)	•	ny <b>two</b> suitable temporary joining methods – bolts/ ether, KD fittings, etc.	nuts, slot-in, screws	, 2x2	[4]
(c)	Any suita if fewer.	able ideas. At least three different ideas for maxim	num marks. Pro rata	1	
	Simple di	rawings displaying a low standard or limited range		0–2	
	shad	awings displaying a good standard and a rano ling/colour/annotation etc. ality drawings using a wide range of techniques w	•	3–4	
	• .	detail	viui ciear annotation	ı 5–6	
	Simplistic Rather m	c designs showing outlines only nore detail, sensible solutions that could work solutions, good fitness for purpose, detailed constr	ruction	0–2 3–4 5–6	
(d)		on of each of the ideas. At least 3 evaluations up to and justification. (1+1)	2 marks each	0–6 2	[8]
(e)	Poor line Good line High star Dimension Construct A simplis Most cor anno All construct	of drawing quality, proportions, little detail e work, use of colour, proportions, some detail hadard throughout with a range of techniques that sh ons 2 or 3 overall dimensions only – 1 Additional detail dimensions – 2 ction details tic approach showing little or no detail of constructionstructional detail may be obvious from overall votation ructional detail will be clear with good annotation arings as necessary	on to be used views or with some	3–4 I	
(f)		materials stated. ate reasons for choice.		2 2	[4]
(g)		method stated. description of process, including: <b>processes</b> s.		1 3 2	[6]

[Total: 50]