CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2014 series

0445 DESIGN AND TECHNOLOGY

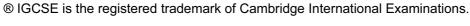
0445/12 Paper 1 (Design), maximum raw mark 50

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, 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 will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2014 series for most Cambridge IGCSE[®], Cambridge International A and AS Level components and some Cambridge O Level components.





Page 2		Mark Scheme		Paper				
		Cambridge IGCSE – October/November 2014	0445	12	2			
1	(a)	Accept any four additional suitable points – lightweight, easy to transpodoes not damage items, items do not move about, compact, etc.	ort/carry, wa	aterpro 1 × 4	of, [4]			
	(b)	Accept drawings of any two carrying methods – handles, shoulder strapwheels, etc.		belt cli 2 × 2	ip, [4]			
2	(a)	Accept any four additional suitable points – easy to catch shapes, attra realistic fish shapes, appeals to children, cannot see fish, etc.		r/shape 1 × 4	e, [4]			
	(b)	Accept drawings of any two catching methods – magnet, hook/eye, 'Ve etc.	_	pads, 2 × 2	net, [4]			
3	(a)	Accept any four additional suitable points – weather/water resistant, eacreates movement, makes a noise, minimal power use, easy to set up,		rod, 1 × 4	[4]			
	(b)	Accept drawings of any two sensing devices – tilt switch, sensing pad, mechanisms, ratchet mechanism, movement sensor, strain gauge, etc.	•	r 2 × 2	[4]			
Questions 1, 2 and 3								
	(c)	Any suitable ideas. At least three different ideas for maximum marks. Pro rata if fewer.						
		Communication Simple drawings displaying a low standard or limited range of technique Clear drawings displaying a good standard and a range of techniques –		0–2				
		/colour/annotation etc High quality drawings using a wide range of techniques with clear annotation and						
		Suitability Simplistic designs showing outlines only Rather more detail, sensible solutions that could work Accurate solutions, good fitness for purpose, construction detail		0–2 3–4 5–6	[12]			
	(d)	Evaluation of each of the ideas. At least 3 evaluations up to 2 marks ea Selection and justification $(1+1)$	ch	0–6 2	[8]			

	Cambridge IGCSE – October/November 2014	0445	12	2
(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 a	all detail	1 2–3 4	
	Dimensions 2 or 3 overall dimensions only (1) Additional detail dimensions (1)		2	
	Construction details A simplistic approach showing little or no detail of construction to be used 0–2 Most constructional detail may be obvious from overall views or with some annotation 3–4			
	All constructional detail will be clear with good annotation and additional necessary	l detail drav	-	
(f)	Suitable specific materials stated (1 + 1) Appropriate reasons for choice (1 + 1)		2 2	[4]
(g)	Suitable method stated Good detailed description of: processes tools		1 0–3 0–2	[6]
				[50]

Syllabus

Paper

Mark Scheme

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