



General Certificate of Secondary Education

Design and Technology: Graphic Products Foundation Tier *Specification 3543*

Mark Scheme

2005 examination – June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Foundation 3543

Question 1

(a)	Accuracy	four sectors correct and complete	2 marks	
		two/one sectors correct or incomplete	1 mark	
		incorrect sectors/not attempted	0 marks	(2 marks)
(b)	Colour	good colour in shapes – tone, 3D and block colour	2 marks	
		adequate colour, conveys information or good coloured hatching	1 mark	
		consistently outside borders/not attempted or monochrome hatching	0 marks	(2 marks)
(c)	Key	matching key to all sectors	1 mark	
		incorrect/not attempted	0 marks	
		quality colour/hatch	1 mark	
		poor/not attempted	0 marks	(2 marks)

Total 6 marks

Question 2

Reward: Any relevant criteria e.g. ingredients, product information, price, volume, flavour, recycling symbol, logo, slogan, sell by date/best before date, contents (e.g. 30% more), bar code, (stand out), (clear graphics), colourful, images and safety

(a)	Point 4	relevant criteria	1 mark	(1 mark)
		reasoned justification	1 mark	(1 mark)
		not relevant/not attempted	0 marks	
(b)	Point 5	relevant criteria	1 mark	(1 mark)
		reasoned justification	1 mark	(1 mark)
		not relevant/not attempted	0 marks	

(Point and reason must be checked together)

Total 4 marks

Question 3

Reward: Best evidence

(a)	(i)	Use of specification Items from Question 2 addressed. (<i>pro rata 5 x 1</i>) Including: AQAPOP Appeal to young people Physical activity of sport + Point 4 + Point 5	5 marks	(5 marks)
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(ii) Evidence of three designs			
Three discrete ideas	1 mark		
Totally inappropriate/not attempted	0 marks	(1 mark)	
(iii) Quality of sketching			
Very good consistent quality (e.g. good pencil or fine liner)	4-5 marks		
Some evidence of good line quality	2-3 marks		
An attempt, untidy, blunt lines	1 mark		
Inappropriate <i>e.g. felt tip, scribble, not attempted</i>	0 marks	(5 marks)	
(iv) Colour			
Colour consistently indicated (rendering/swatches etc.)	3 marks		
Colour considered on some aspects of design	2 marks		
Colour used sparingly (minimum evidence)	1 mark		
Colour not considered	0 marks	(3 marks)	
(b) (i), (ii) & (iii) Notes	3 × 1 mark		
One explanation which is justified	1 mark	(1 mark)	
Critical, relevant, and/or judgement evident, descriptive	1 mark	(1 mark)	
Not attempted or self congratulatory	0 marks	(1 mark)	
(No repetition of answers)			
			Total 17 marks

Question 4

(a) (i) Use of specification			
<i>pro rata, one mark per criteria</i>			
AQAPOP			
Appeal to young adults			
Physical activity			
Two items from Question 2	5 x 1 mark	(5 marks)	
(ii) Quality of drawings			
Very good line quality, clear, neat, etc.	4 marks		
Adequately drawn, some reasonable lines	2-3 marks		
A fair attempt, lacks precision	1 mark		
Scribble/Not attempted	0 marks	(4 marks)	
(iii) Layout			
Good visual impact, effective use of space	4 marks		
Satisfactory, sense of composition	3 marks		
Adequate spacing, some imperfections	2 marks		
An attempt but lacks clarity and/or poorly spaced, crowded	1 mark		
Unrecognisable or not attempted	0 marks	(4 marks)	
(iv) Colouring			
Good quality, enhances drawing, visual impact, <i>e.g. good tonal control, very good block colouring</i>	4 marks		
Satisfactory, controlled use of media, some attempt at higher skills <i>e.g. tone, block colour</i>	3 marks		
Moderate quality, some enhancement (good monochrome max)	2 marks		
Poor quality, untidy/scribble, does little to enhance product	1 mark		
An attempt – very poor, scribble. No colour – line drawings only	0 marks	(4 marks)	

(b)	(i) B.S. Horizontal	Leader lines with gap to elevation	1 mark	
	Vertical	Line parallel to drawing	1 mark	
		Arrowheads neat, (closed umbrella)	1 mark	
		Number 50 orientation	1 mark	(4 marks)
	(ii) Scale	1:1 (no variation)	1 mark	(1 mark)
Total 22 marks				

Question 5

(a) Specification – relate to Presentation drawing only on sheet 4

(i)	Point 1 – AQAPOP seen	Good critical, <u>reasoned or justified</u> statement	2 marks	
		Superficial statement/description	1 mark	
		One word answer <i>e.g. in corner</i>	0 marks	(2 marks)
(ii)	Point 2 – young people	Good critical, <u>reasoned or justified</u> statement	2 marks	
		Superficial statement/description	1 mark	
		One word answer <i>e.g. cheap, coloured, pretty</i>	0 marks	(2 marks)
(iii)	Point 3 – activity	Good critical, <u>reasoned or justified</u> statement	2 marks	
		Superficial statement/description	1 mark	
		One word answer <i>e.g. cheap, coloured, pretty</i>	0 marks	(2 marks)
(iv)	Point 4 – point transferred	Good critical, <u>reasoned or justified</u> statement	2 marks	
		Superficial statement/description	1 mark	
		One word answer <i>e.g. cheap, coloured, pretty</i>	0 marks	(2 marks)
(v)	Point 5 – point transferred	Good critical, <u>reasoned or justified</u> statement	2 marks	
		Superficial statement/description	1 mark	
		One word answer <i>e.g. cheap, coloured, pretty</i>	0 marks	(2 marks)
(b)	(i) Board: <i>e.g. strong, surface for printing, cheap, waterproof, creases, processed, etc</i> (Foil acts as a bacterial barrier)	Correct reasoned statement/description	1 mark	
		One word answer/not attempted	0 marks	(1 mark)
	(ii) Coating: <i>e.g. 'plastic film', wax, waterproof</i>	<u>Clear</u> statement	2 marks	
		Superficial statement/description	1 mark	
		One word answer/not attempted	0 marks	(2 marks)

(iii) Straw: *e.g. pierce container, 'hole' on top or to pierce plastic straw packet*

Reasoned statement (mentions piercing the foil or hole)	3 marks	
Superficial statement/description (pierce container or packet only)	2 marks	
One word answer/an attempt	1 mark	
Not attempted	0 marks	(3 marks)

Total 16 marks

Question 6

(a) Desk Top Publishing

Complete – 3 elements correct	2 marks	
– 2 elements correct	1 mark	
Incorrect / not attempted	0 marks	(2 marks)

(b) (i) Double-sided tape

Advantage: *e.g. strong, non-stain, economical, thin layer of film, instant, adheres well*

<u>Reasoned</u> statement	2 marks	
Superficial statement/description, confused	1 mark	
One word answer/not attempted	0 marks	(2 marks)

Disadvantage: *e.g. removes paper, needs clean surface, difficult to peel off backing-layer, affected by heat*

<u>Reasoned</u> statement	2 marks	
Superficial statement/description, confused	1 mark	
One word answer/not attempted	0 marks	(2 marks)

(b) (ii) Hot Glue

Advantage: *e.g. quick, strong, small amount, set within minutes*

<u>Reasoned</u> statement	2 marks	
Superficial statement/description, confused	1 mark	
One word answer/not attempted	0 marks	(2 marks)

Disadvantage: *e.g. dangerous, specialist tool, thick, 'stringing', expensive*

<u>Reasoned</u> statement wait for glue to melt/warm-up	2 marks	
Superficial statement/description, confused. Thick glue layer: if incorrectly placed, tears card. Health and safety	1 mark	
One word answer/not attempted	0 marks	(2 marks)

(c) Equipment, material and uses – related to PoS display

Name:	(Hot) glue (hot melt) gun	1 mark	(1 mark)
Use:	Gluing card/board together (not paper) on the stand	2 marks	
	Superficial answer <i>e.g. sticking things or generic use</i>	1 mark	
	Not attempted/incorrect	0 marks	(2 marks)
Name:	Corrugated card/board (<i>accept corriflute</i>) not cardboard	1 mark	(1 mark)
Use:	Forming the PoS display parts and/or back support	2 marks	
	Superficial answer <i>e.g. making things or generic use</i>	1 mark	
	Not attempted/incorrect	0 marks	(2 marks)
Name:	Radius Aid (<i>Radius Curve/template</i>)	1 mark	(1 mark)
Use:	Marking out radius corners	2 marks	
	Superficial answer <i>e.g. drawing rings/corners or generic use</i>	1 mark	
	Not attempted/incorrect	0 marks	(2 marks)
Name:	Stanley, craft-knife (<i>not just knife</i>)	1 mark	(1 mark)
Use:	Cutting shapes/outlines of PoS display and/or back support	2 marks	
	Superficial answer <i>e.g. cutting card or generic use</i>	1 mark	
	Not attempted/incorrect	0 marks	(2 marks)

(d) (i)	<i>e.g. safety, environmental, weight saving, costs, easier production. Do not accept recycleable.</i>		
	<u>Reasoned</u> statement	2 marks	
	Superficial statement/description	1 mark	
	One word answer/not attempted	0 marks	(2 marks)
(ii)	From list only: Polyethylene terephthalate, (<i>accept PET</i>) PETE, HDPE, LDPE, PVC, PP	2 marks	
	Thermoplastic	1 mark	
	Other material, not attempted	0 marks	(2 marks)
(iii)	Injection blow moulding or blow moulding	1 mark	(1 mark)

Total 27 marks

Question 7

(a) (i)	Laser / inkjet / bubble jet printer	2 marks	
	Printer / plotter	1 mark	(2 marks)
(ii)	Scanner, digital camera, camera mobile phone, webcam	2 x 1 mark	(2 marks)
(b) (i)	across is 'X' axis	1 mark	
	along is 'Y' axis	1 mark	(2 marks)
(c)	CAM advantages to industry	2 x 2 marks	

e.g. new instructions stored electronically, fast down load time, quick change, respond to markets, consistency of product, no human error, 24/7 working, client needs.

Advantage 1

Good reasoned understanding of advantage	2 marks	
Some understanding	1 mark	
Not attempted, wrong context	0 marks	(2 marks)

Advantage 2

Good reasoned understanding of advantage	2 marks	
Some understanding or confusion	1 mark	
Not attempted, wrong context	0 marks	(2 marks)

Total 10 marks**Question 8**

(a)	(i)	288 ml	288 millilitres, volume stated on container			
			Good understanding	2 marks		
			Some understanding	1 mark		
			Incorrect, not attempted	0 marks	(2 marks)	
	(ii)	'e' mark <i>e.g. guarantee of quantity, mini/max quantity tolerance (average quantity) approximately.</i>		Good understanding	2 marks	
				Some understanding, mention of European standard, estimated	1 mark	
				Incorrect, not attempted	0 marks	(2 marks)
	(iii)	Recycle		Good and full understanding <i>e.g. ref to aluminium</i>	3 marks	
				Some understanding evident – some features identified, <u>can be</u>	2 marks	
				Little understanding – one feature, superficial, <u>has been</u>	1 mark	
				Incorrect, not attempted	0 marks	(3 marks)
			(1 mark for aluminium; reference to 'can be recycled' for 2 marks)			
(b)	TM		(NB Trade Mark – name or symbol that a manufacturer always uses on its product, protected by law so that no-one else can use them).			
			Good and full understanding (1 mark for trademark and some reference to registered, licence, recognisable or protection)	3 marks		
			Some understanding evident – some features identified	2 marks		
			Little understanding – one feature, superficial	1 mark		
			Incorrect, not attempted	0 marks	(3 marks)	
(c)	Crushed can symbol		The meaning is clearly evident	2 marks		
			Meaning implied, confused	1 mark		
			Unrecognisable	0 marks		
		2D drawing	1 mark			
		Block colour (black and white)	1 mark			
	'Wordless' message	1 mark	(5 marks)			

(d)	(i)	Good understanding <i>e.g. compacting, less volume, easy to transport</i>	2 marks	
		Some understanding	1 mark	
		Incorrect, not attempted	0 marks	(2 marks)
	(ii)	Reason 1:		
		Good understanding <i>e.g. non-biodegradable, waste of resources, non-renewable resources, high energy manufacture, a lot of pollution during manufacture</i>	1 mark	(1 mark)
		Explanation:		
		Quality of reasoning – clear understanding, some understanding	2 marks	(2 marks)
		Reason 2:		
		Good understanding <i>e.g. non-biodegradable, waste of resources, non-renewable resources, high energy manufacture.</i>	1 mark	(1 mark)
		Explanation:		
		Quality of reasoning – clear understanding, some understanding (Do not accept dangerous to animals)	2 marks	(2 marks)
		(or if reason is incorrect award zero for explanation)		

Total 23 marks

TOTAL MARKS ON PAPER 125