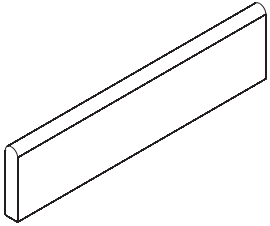
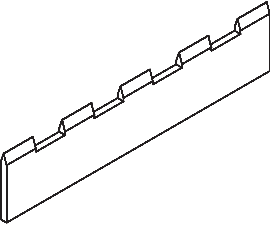
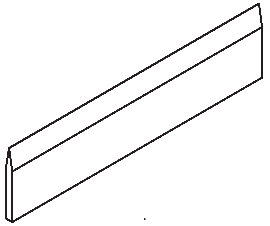
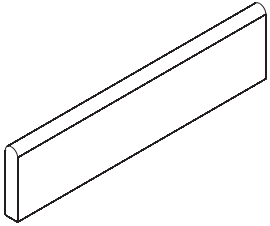
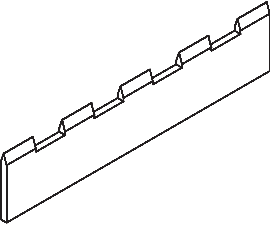
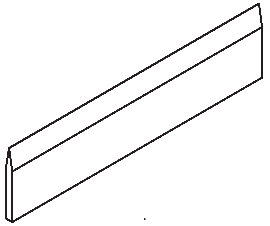
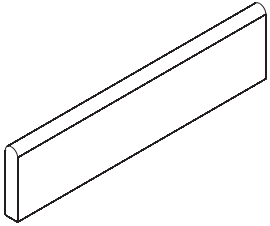
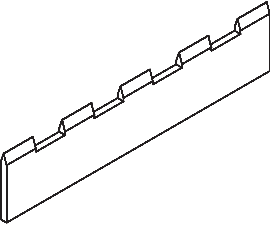
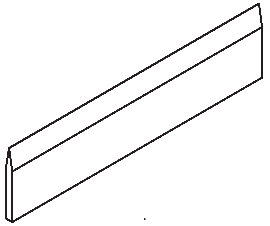


Mark Scheme Summer 2008

GCSE

GCSE Design & Technology: Graphic Products (3972) Paper 2F

3972 2F Mark Scheme

Question Number	Answer	Mark								
1 (a)	<p>Name: Scissors / Shears (1) Use: Cutting / scoring / curling / creasing / trimming (1)</p> <p>Name: Safety/cutting/Maun rule / rule / ruler (1) Use: Guiding / measuring / folding / protecting / protection / holding down (1)</p> <p>Name: Pen / Marker / board marker / felt tip / highlighter / magic marker / Tippex / correction pen/ eraser / rubber / glue pen / fine liner(1) Use: Applying colour / drawing / writing / highlighting / correcting / erasing / rubbing out / gluing/ joining (1)</p> <p style="text-align: right;">(6 x 1)</p>	(6)								
1 (b) (i)	<p>Three names of blades given:</p> <table border="1" data-bbox="260 875 1023 1693" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="260 875 641 913" style="text-align: center;">Type of blade</th> <th data-bbox="641 875 1023 913" style="text-align: center;">Name</th> </tr> </thead> <tbody> <tr> <td data-bbox="260 913 641 1155" style="text-align: center;">  </td> <td data-bbox="641 913 1023 1155" style="text-align: center;">Creasing blade</td> </tr> <tr> <td data-bbox="260 1155 641 1451" style="text-align: center;">  </td> <td data-bbox="641 1155 1023 1451" style="text-align: center;">Perforating blade</td> </tr> <tr> <td data-bbox="260 1451 641 1693" style="text-align: center;">  </td> <td data-bbox="641 1451 1023 1693" style="text-align: center;">Cutting blade</td> </tr> </tbody> </table> <p style="text-align: right;">(3 x 1)</p>	Type of blade	Name		Creasing blade		Perforating blade		Cutting blade	(3)
Type of blade	Name									
	Creasing blade									
	Perforating blade									
	Cutting blade									

1 (b) (ii)	<p>Two reasons given:</p> <p>Any two from:</p> <ul style="list-style-type: none"> • Accuracy (1) • Fewer production errors (1) • Fast / quick (1) • Reduced production costs (1) (<i>do not accept 'cheaper' by itself</i>) • High demand for product (1) • Cutter can be used many times (1) <p style="text-align: right;">(2 x 1)</p>	(2)
	Total for question	11

Question Number	Answer	Mark
2 (a)(i)	<p>One property given</p> <p>Any one from:</p> <ul style="list-style-type: none"> • See through / transparent (1) • Non toxic / inert / does not taint (1) • Flexible / can be folded (1) • Lightweight (1) • Tough (1) • Impermeable / acts as a barrier (1) • Prevents contamination (1) • Prevents it drying out (1) • Prevents tampering (1) • Waterproof (1) <p style="text-align: right;">(1 x 1)</p>	(1)
2 (a)(ii)	<p>Three reasons given</p> <p>Any three from:</p> <ul style="list-style-type: none"> • Can be printed onto (1) • Flexible / can be folded (1) • Can be cut / torn / opened (1) • Prevents contamination (1) • Recyclable / biodegradable (1) • Low cost / cheap (1) • Lightweight (1) <i>(do not accept 'easy' by itself)</i> • Easy to join (1) • Can be coated (1) • Strong enough for long enough (1) • Hygienic / clean (1) <p style="text-align: right;">(3 x 1)</p>	(3)
2 (a)(iii)	<p>One advantage explained</p> <p>The box would become stronger/stiffer/tougher/more durable and this would protect the sandwich more/longer/ protect freshness / make it easier to hold/keeps shape.</p> <p style="text-align: right;">(2 x 1)</p>	(2)
2 (b)(i)	<p>One material given</p> <p>Any one from:</p> <ul style="list-style-type: none"> • PS / polystyrene (1) • PET / Polyethylene Terephthalate (1) • HDPE / high density polyethylene (1) • PVC / polyvinyl chloride (1) <p style="text-align: right;">(1 x 1)</p>	(1)

2 (b)(ii)	<p>One description given</p> <p>Any one from:</p> <ul style="list-style-type: none"> • The shape will change and it will become smaller / flatter • The shape will become smaller and flatten out. <p style="text-align: right;">(2 x 1)</p>	(2)
2 (c)	<p>Two disadvantages stated</p> <p>Any two from:</p> <ul style="list-style-type: none"> • It will be heavier (1) • It can rust (1) • It will deform easier (1) • It will not be as attractive (1) • It will require painting / plating / finishing (1) • Sharp edges will have to be removed (1) • It conducts heat (1) • More expensive (1) <p style="text-align: right;">(2 x 1)</p>	(2)
Total for question		11

Question Number	Answer	Mark
3 (a)(i)	<p>Market</p> <p>Point: The cost of manufacturing the game should be low Reason: To maximise profits</p> <p>Point: The game should appear expensive / value for money Reason: To justify high price</p> <p>Point: The game should stand out from other games / be attractive Reason: To increase sales</p> <p>Point: Suit target audience Reason: Consumer satisfaction</p> <p style="text-align: right;">(2 x 1)</p>	(2)
3 (a)(ii)	<p>Environment</p> <p>Point: Minimum materials used Reason: Resource conservation</p> <p>Point: Made from recycled materials / Possible to be recycled Reason: Resource conservation / waste minimisation</p> <p>Point: The manufacture of the game should not cause pollution Reason: Protection of the environment</p> <p>Point: The game should display a recycle symbol Reason: Consumer awareness</p> <p style="text-align: right;">(2 x 1)</p>	(2)

<p>3 (a)(iii)</p>	<p>Quality</p> <p>Point: Any text should be easy to read / clearly printed Reason: Consumer satisfaction / brand reputation</p> <p>Point: The materials the game is made from should be durable /reliable Reason: Consumer satisfaction / brand reputation</p> <p>Point: The game should comply with relevant legal standards Reason: Moral and legal obligation</p> <p>Point: Fit for Purpose Reason: Consumer satisfaction / better sales</p> <p style="text-align: right;">(2 x 1)</p> <p><i>Some flexibility should be given as some points may cross over descriptions.</i></p>	<p style="text-align: right;">(2)</p>
<p>3 (b)(i)</p>	<p>Two reasons given</p> <p>Any two from:</p> <ul style="list-style-type: none"> • Has a smooth surface (1) • Can be printed on (1) • Is sufficiently tough / durable (1) • Is lightweight (1) • Low cost / cost effective (1) • Can be easily stuck/shaped to the playing board (1) • Flexible (1) • Enhances appearance (1) <p style="text-align: right;">(2 x 1)</p>	<p style="text-align: right;">(2)</p>
<p>3 (b)(ii)</p>	<p>Two reasons given</p> <ul style="list-style-type: none"> • Protection / more durable / makes it last longer / hard wearing / water resistant • Easily cleaned / can be wiped over • Enhances/maintains appearance <p style="text-align: right;">(2 x 1)</p>	<p style="text-align: right;">(2)</p>

<p>3 (c)</p>	<p>Two properties and reasons given</p> <p>Any two from:</p> <ul style="list-style-type: none"> • Property: It is tough / durable / strong • Reason: The case will withstand use / protect cards • Property: It is hard / rigid • Reason: Will maintain shape / protect cards • Property: It is self coloured • Reason: Reduces production processes / looks attractive • Property: It is non toxic • Reason: It will be safe for the user • Property: It is lightweight • Reason: It will be easy to transport / store • Property: It is a thermoplastic • Reason: It can be injection moulded (<i>do not accept 'shaped' / 'formed'</i>) <p>(Cost is not a valid property, but if a valid reason is linked to cost 1 mark)</p> <p style="text-align: right;">(2 x 1) (2 x 1)</p>	<p style="text-align: center;">(4)</p>
<p>3 (d)</p>	<p>Two quality control checks given</p> <p>Any two from:</p> <ul style="list-style-type: none"> • Ink density / colour • Registration / alignment of colour separations • Size • Physical properties of material <p style="text-align: right;">(2 x 1)</p>	<p style="text-align: center;">(2)</p>
<p>3 (e)</p>	<p>Any one from:</p> <ul style="list-style-type: none"> • The playing parts are simple shapes and this means the moulds will be easier / cheaper / quicker to manufacture. • The playing parts are hollow and this reduces the materials required / costs • The shapes do not have undercuts and this makes removal from the mould easier. <p style="text-align: right;">(2 x 1)</p>	<p style="text-align: center;">(2)</p>

3 (f)	<p>One method explained:</p> <p>Be safe for users:</p> <ul style="list-style-type: none"> • The contents do not have sharp edges and this means they cannot cut the user. • Some contents are small and this means they will not choke the user if swallowed. • Some contents are too big to be swallowed therefore no risk of choking. • The contents are made from inert materials/are easily cleaned and this means they will not poison the user/prove to be a health risk to the user. <p style="text-align: right;">(2 x 1)</p> <p>Be easy to store:</p> <ul style="list-style-type: none"> • The playing board folds this reduces the space / size / tessellate required for storage. • The box has a lid this means it will keep the contents within. • The tray holds the components separately this means you know where to put each bit. • Box is cuboid therefore it stacks well / tessellates • Contents fit in box therefore won't get lost <p style="text-align: right;">(2 x 1)</p>	(2)
	Total for question	22
	Total for paper	44