

# **Design and Technology**

General Certificate of Secondary Education

Unit **A554**: Designing Influences

## **Mark Scheme for January 2012**

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**Annotations**

In general use only **green ticks** to indicate creditable points.

The number of green ticks on a response must add up to the number of marks in the mark box.

**REP** can be used to indicate a repeat of an already credited point.

**SEEN** can be used to show that a 'continued' answer has been looked at.

**Highlight** can be used to identify linked statements that, together, attract a tick.

**BOD** can be used to indicate benefit of the doubt. It must be accompanied with a green tick. To be used sparingly on any one script.

**TV** can be used to indicate too vague for credit.

**Do not use the ? or any of the other boxed numbers available on the toolbar.**

**Subject-specific Marking Instructions**

Possible answers separated by slash lines (Strong/tough/durable/stiff/rigid) are mutually exclusive alternatives and can only attract credit for one of them.

Possible answers separated by commas (brand awareness, greater availability, seen as fashion items) are all individually acceptable for credit.

Question		Answer			Marks	Guidance
1	(a)	Handles/grips/ handlebar Pole/shaft Feet pads/platform Rubber foot/boot Spring Only for 1 person	Comfortable handles Comfortable foot rests Adjustable Non slip foot pads Fits average person/child	Strong/tough/ durable/stiff/ ridgid/ High strength to weight ratio Non rusting 3 x 1	3	One word answers are acceptable from the lists on the left. Do not accept no sharp parts unless qualified. <b>Do not accept</b> (unless qualified): <i>size, colour, modern, light, safe, lightweight, small, easy to use, ergonomic, fun to use, teaches balance, goes up and down, portable,</i>
	(b)	(i)	<b>Spring</b> or coil. Ignore compression/tension etc.	1 x 1	1	<b>Do not accept</b> <i>string</i>
		(ii)	Compression/squashing/pushing/push force/pressure Accept gravity, weight, down force/up force, resistance Torsion/twist/twisting	1 x 1	1	<b>Do not accept</b> <i>spring, kinetic, momentum, body mass,</i>
		(iii)	Side bits on the foot pads(1) so feet don not slip off(1) Grip/rubber/bigger foot rest(1) so feet do not slip(1) Cover on the spring(1) so not get laces/fingers caught up(1) Padding on the handles(1) not hurt if it hits you(1) Larger rubber base(1) more stable(1)	2 x 1	2	1 mark for an improvement 1 mark for reason <b>why</b> it improves safety Do not accept foot straps, as they are less safe. <b>Do not accept</b> <i>'to make it safer', make it stronger, make it easier to use</i>
	(c)		Answer such as: <b>Market research</b> to include: consumer preference tests such as ranking and rating tests, questionnaires and surveys to <b>identify potential target market</b>  <b>Promote</b> specific/desirable/new features: safety, cost, etc. Make it <b>appeal</b> to the target market. Special offers. Better than competition. New features. Selling points. <b>Who</b> is it specifically for, what do they need.  Results from <b>market intelligence</b> and <b>budget allocation</b> used to determine marketing strategy to include: <b>Advertising</b> campaign, flyers, telemarketing, posters, ephemera – flyers, Media advertising – radio, television, magazines <b>Where</b> to sell, appropriate <b>selling price, packaging,</b> 1 mark for two of the above plus 1 mark for an explanation/qualification of one of the points.	2 plus 1	3	References to: <b>Promotion</b> – <i>Getting the product known</i> <b>Placement</b> – <i>Where the product is located</i> <b>People</b> – <i>Who will buy the product</i> <b>Process</b> – <i>How is the product obtained</i> <b>Price</b> – <i>How much will it cost</i>  Look for specific examples: generic answers such as <i>ergonomic</i> or <i>aesthetically pleasing</i> , should <b>not</b> be awarded any marks. <b>Do not accept</b> <i>reduce the price</i> on its own. <b>Do not accept</b> references to designing/modifying the product.
				<b>Total</b>	<b>10</b>	

Question		Answer	Marks	Guidance
2	(a)	Width/size of head Distance from ear to front of face/eyes Width/size of nose Distance between eyes Size of eyes Curve/size/height of ears Mention of the 95 <sup>th</sup> percentile/average size head/nose 3 x 1	3	<b>Do not accept</b> just facial features listed such as <i>ears, eyes, nose</i> – unless there is specific mention of size/width/depth <b>Accept</b> sizes/lengths/widths related to parts of the glasses when qualified with reference to a facial feature.
	(b)	Reasons include: <b>Trend setting:</b> brand awareness, greater availability, seen as fashion items <b>More choice</b> designs and colours/prescription/lightweight <b>Need:</b> more people visit hot climates/changes in weather/sunbathing more popular <b>Better understanding:</b> the need for UV <b>protection</b> <b>Driving</b> in bright or low sun can be made <b>safer</b> by wearing sunglasses to <b>cut down the glare</b> <b>Cost</b> of mass production means lower price. 2 x (1 + 1)	4	This question is about why sunglasses have become <b>more</b> popular in recent years (say in the past 40 years), <b>not</b> about why people wear sunglasses. <b>Do not credit</b> ‘ <i>more popular</i> ’ <b>Do not accept</b> references to <i>dark lenses making it easier to see in bright sunlight</i>  1 mark for a point plus 1 mark for qualification Examples: <i>Trend setting [1] people see celebrities and sportsmen wearing sunglasses and want to follow [1]</i>
	(c)	Answers should refer to: Use of copyrights, ©, trademarks, TM, patenting, and registered designs (1) Difference between the types of protection (1) Prevent copying without permission (1) Or may involve paying a fee to the designer(1) Designer has legal rights (1) Action can be taken against illegal copying (1) 3 x 1	3	<b>Do not accept</b> <i>no one can steal or copy the design/ makes it illegal to copy the design</i> for a mark <b>Do not credit</b> ‘ <i>logos</i> ’ Example answer: <b>Copyrights, patents and registered trademarks</b> – [1 mark] <i>prevent ideas and products being copied without the permission [1] of the designer/manufacturer. If these ideas are copied without permission, those responsible can be taken to court, prosecuted and fined [1]</i>
<b>Total</b>			<b>10</b>	

Question		Answer			Marks	Guidance
3	(a)	Easy to hold/carry/use Lightweight Immediately ready for use/quicker to use Different colours/designs High quality images Colour pictures	No film to develop/more economical Red eye reduction Face recognition View pictures/playback More functions Automatic settings/ Focussing/zoom Memory cards	Built in flash/night pictures Rechargeable battery Can take lots of photos Timer Video/sound/movies Can be connected to PC Able to edit pictures Touch screen More/better/new technology 3 x 1	3	Accept one word answers.  <b>Do not accept</b> <i>looks good, attractive, fashionable, cheaper, more robust</i> , <b>Do not credit</b> references to smaller/pocket sized  If more than three features given or if two or more features given within the same sentence, then tick the most creditable up to a maximum of 3.
	(b)	Each explanation must consist of two creditable linked points that justify why the chosen feature makes the modern camera successful. Restating the feature attracts no further credit: <i>lightweight</i> A <b>simple</b> explanation such as: <i>makes it easy to carry around (1)</i> A <b>detailed</b> explanation such as: <i>easy to carry around (1) so it is always available for the unexpected opportunity (1)</i> 2 x			4	<b>Example answer 1:</b> Holds a lot of pictures/videos <i>The development of memory cards (1) has enabled manufacturers to make the camera small and compact and store a lot of digital information (1)</i> <b>Example answer 2:</b> Easier to use <i>The rounded edges and careful positioning of the buttons (1) makes it more comfortable to hold and operate (1)</i> If the point given is incorrect eg <i>cheaper</i> , but a clear explanation is given, the marks can be awarded accordingly.

Question	Answer	Marks	Guidance
(c)	<p><b>Example of a computerised device (1), the effect (positive, or negative points) it has had on designers or makers(1) explanation of the outcome(s) (1)</b></p> <p>Examples such as:            CAD designs can be sent electronically            Design can be copied/ deleted/edited easily/quickly            3D/virtual/walk through modelling            Problems:viruses,RSI,back injuries</p> <p>Products such as ipad, touch screen, etc            increased competition: cameras on phones            so camera designers have to come up with new ideas            Miniature components allow for smaller, thinner, lighter, more portable products</p> <p>Products (iphone) need to be compatible with existing digital technology(laptop)            Technology (digital downloads) makes some products (CD's) redundant/obsolete            Digital products are easy to use</p> <p>Computers 100% accurate/no human error so higher quality manufacture            Not so many workers needed people out of a job            Production cheaper/more cost effective, fewer workers so lower wages            CAM designs mass produced more quickly with less waste            CAM can work 24/7            Computers are expensive, only economic on long run, highly skilled workers needed for one off products/jewellery/furniture            Advertise and sell products on line</p> <p style="text-align: right;"><b>3</b></p>	3	<p><b>Do not credit</b> generalised statements such as <i>push the boundaries, advancing technology, or keeping up with new developments</i></p>
	<b>Total</b>	<b>10</b>	

Question	Answer	Marks	Guidance
4	<p>(a) <b>Level 1 (0 to 2 marks)</b>  <i>Some understanding of the importance/legacy of the Trend Setter</i>  <i>Little or no use of specialist terms.</i>  <i>Answers ambiguous or disorganized.</i>  <i>Errors of grammar, punctuation and spelling.</i>  <b>Limited range of points made with some relation to the Trendsetter and with limited justification</b></p> <p><b>Level 2 (3 to 4 marks)</b>  <i>Reasonable understanding of the importance/legacy of the Trend Setter.</i>  <i>Some use of specialist terms, not always used appropriately.</i>  <i>Information presented for most part in a structured format.</i>  <i>Occasional errors in grammar, punctuation and spelling.</i></p> <p><b>Range of points adequately made with some relationship to the Trendsetter, with explanations and some justification</b></p> <p><b>Level 3 (5 to 6 marks)</b>  <i>Detailed understanding of the importance/legacy of the Trend Setter.</i>  <i>Specialist terms used appropriately and correctly.</i>  <i>Information presented in structured format.</i>  <i>Accurate use of grammar, punctuation and spelling with some minor errors.</i></p> <p><b>Range of well made points that mostly relate to the Trendsetter and with reasoned explanations through discussion and justification</b></p>	6	<p><b>Answer space for this question covers two pages. Examiners must ensure that the entire scoris screen is checked for creditable points.</b></p> <p>Continuous prose – question is marked for quality of written communication.</p> <p>Only <u>one</u> Trend Setter must be referred to.</p> <p>If the answer relates only to the Iconic product then only award Level 1</p> <p>There is no credit for mention of the Trendsetter by name or the name of the Iconic Product, as these are given in the question.</p> <p>Bullet points or list/sequence of discrete points maximum of 2 marks</p> <p><b>Typical connectives that may be used to link points of discussion:</b>  so that, because, therefore, however, although, but, consequently, alternatively, whenever, besides, moreover, since, whereas, despite.</p>



Question		Answer	Marks	Guidance
4	(b)	<p>Content of answer refers to creditable points about the <b>impact</b> and the <b>influence</b> of the Iconic Product. These may be discrete points referring to different aspects of the Iconic Product, or they may be linked points that discuss, explain, exemplify, qualify or describe one aspect of the impact or influence.</p> <p>Answers must relate to <b>what</b> was so different the about the Iconic Product and or <b>why</b> the Iconic Product has been so influential.</p> <p style="text-align: right;">4 x 1</p>	4	<p>Quality of written communication is <b>not</b> assessed in this part of Question 4.</p> <p>This can be a different Iconic Product to that of the Trendsetter chosen in part (a).</p> <p>There is <b>no credit</b> for mention of the Trendsetter by name or the name of the Iconic Product, as these are given in the question.</p> <p>Some answers may provide more than two creditable points for each or either reason. Credit the points wherever they are presented.</p>
		<p><b>The Memphis Group</b>            Furniture, fabrics, ceramics, glass and metal objects            Broke away from Form follows Function            Inspiration from Art Deco, De Stijl, Mondrian, 1950's Pop Art, Warhol.            Rejected/disregarded idea of functional design and rules of good taste (modernism)            Focussed almost entirely on aesthetics rather than ergonomics            Bright bold (often primary) colours            In contrast to the dull dark colours (browns and black) of the 1980's            Geometric. Shocking. Outrageous. Massive visual impact.            Instantly recognisable. Ground breaking            Challenged the established norms of design of the period            Caused a widespread re-think about the rational industry-oriented conventions            Made for a rethink of many strongly held beliefs            One off gallery pieces: became collectable            Used cheaper materials: chipboard and laminates. To a high standard.            Used materials out of context: kitchen work top surfaces for wardrobes</p>		<p><b>Typical connectives that may be used to link points of discussion:</b>            so that, because, therefore, however, although, but, consequently, alternatively, whenever, besides, moreover, since, whereas, despite.</p> <p><b>Carlton Room Divider</b>            Combined a range of functions (bookshelf, storage, drawers) in a unique unit            It is a room divider, a storage unit <b>and</b> a work of art/sculpture.            Looks toy like, a fantasy ship            Sheer size makes it stand out            Open plan homes of the 60's and 70's: this was a way of dividing the space.            Broke away from Form follows Function: Aesthetic            Random use of Bold Bright colours            Geometric shapes unusual angles</p>

Question	Answer	Marks	Guidance
	<p>Massive impact on the design world            Inspired many new designers: Philippe Stark            Influenced Swedish company Ikea            Designs still sought after today</p>		<p>Central weight distribution, drawer in the middle, whereas traditional products were symmetrical and balanced on each side            Combination of simple shapes to give a complex look/unusual/interesting/unique            One off            Aimed at high end market but cheap materials            Chipboard and laminates/ melamine            Used to high standard            Copies still made/sold today.            Rubik cube and Channel 4 logo</p>
	<p><b>Abba</b>            One of the most commercially successful acts in the history of popular music.            Sold 537 million albums worldwide 4<sup>th</sup> next to Elvis, Beatles and Michael Jackson Eurovision Winners.            Successful for 10 years 1972 to 1982 major influence for a long time catchy song hooks, simple lyrics, sound effects (reverb, phasing) and a Wall of Sound achieved by overdubbing the female singers' voices in multiple harmonies.            Made videos because their songs were hits in many different countries and some of these videos became classics because of the 1970s-era costumes and early video effects, such as the grouping of the band members in different combinations of pairs, overlapping one singer's profile with the other's full face, and the contrasting of one member against another.            Long boots and all-in-one suits (jump suits)            Bright colourful and trend-setting costumes, leggings, sequins and tops, flower print dresses. GLAM ROCK  <i>What Abba wore was copied by public and modern day singers and dancers: Maddona, Lady Gaga, clubbing outfits of today</i>            Genre of music: Tribute bands. Abba themed evenings. Films.</p>		<p><b>Lycra</b>            Spandex: a rubbery segment for stretch and recovery, a rigid segment for strength and durability. Is always blended with another fibre such as cotton or linen.            Does not lose integrity with exposure to lotions or the body's natural oils, unlike rubber thread. Lycra (DuPont's brand of spandex), began its foray into the fashion world during the 1960's in women's pantyhose and undergarments.            The fabric is rather uniquely "ex-pandable", and thus ideal for a range of active lifestyle garments and applications.            Widely used: comfort and easy movement on stage            Beautiful sheen under stage lighting. Bright and bold colours. Provides maximum support during high impact activities.            Exercise, keep fit, modern day clubbing outfits, gymnastics, athletics, sportswear.            Clothing appropriate for men and women.            Comfortable, proud of their body.            Fits snugly round body, shows off figure.</p>

Question	Answer	Marks	Guidance
	<p><b>Confectionary packaging</b>            It is the science, art and technology of enclosing or protecting products for distribution, storage, sale, and use.            Packaging contains, protects, preserves, transports, storage/display, promotes/appeals/brands, informs, sells and allows for 'eat on the go'.            Originally, confectionary was stored in glass jars and sold in paper/greasproof bags.            Confectionary packaging today is a major buisness.</p> <p>Branding: graphics, colours logos.            Information: contents, nutritional, allergies.            Preserves: stay fresh for longer, chocolate melts at body temperature.            Protects: until ready to be consumed, easy to open and hold, sold in many different outlets, consumer protection.</p>		<p><b>Kit Kat</b>            Britain's number one biscuit since invention in 1930's. Originally developed after a worker at Rowntree's put in a suggestion for a snack that a "man could have in his lunch box for work".            The slogan for the Kit Kat has been "<i>Have a break... have a Kit Kat</i>". Easy to break one finger off at a time, easy to share equally.            Simple easy to remember name and slogan.            Good 'on-the-go' and in lunchbox.            Appeals to children and adults.            In wartime ration pack.            The iconic status has come about through the simplicity and effectiveness of its design:            Use of red – an aggressive selling colour which stands out;            Sans serif font used on the logo – uncomplicated, on a red background really stands out            Visual similarity to oxo, coca cola, virgin – the obvious value of red on white            Developed many variations Chunky, Bite-size, Mint, Orange. Always retain the brand identity.            Multipacks/valuepacks available in Supermarkets.            Two finger and four finger available in shops and petrol stations.            Original packaging was tinfoil, primary packaging, over the chocolate and a bright colourful paper wrapper, secondary packaging: fresher/longer shelf life/convenient.            Now we see freshfoil wrapping and easy tear strip.</p>

Question	Answer	Marks	Guidance
	<p><b>Lasers</b>            A device that emits light through a process of optical amplification based on the stimulated emission of photons. The term "laser" originated as an acronym for Light Amplification by Stimulated Emission of Radiation.            Lasers have the property of being highly directional and focused.            Lasers in the Medical Field: Laser Eye Surgery.            Lasers and Electronics: Compact Disk Players, Video CDs, Supermarket Scanners.            Lasers and Entertainment: Laser Shows            Other Uses of Lasers: Laser fibre optics used by computers, measuring distances, cutting, blasting, and welding,</p>		<p><b>Bar Code Readers</b>            An electronic device for reading printed barcodes. Convenient, time saving, accurate and foolproof. Provides wealth of information to the retailer about what is selling well, buying profile of customers, seasonal selling patterns, daily selling patterns. Cashiers just scan bars and all information accessed: price so that bill made up for customer, stock records updated for re stocking shelves and automatic re-ordering from central distribution centre. Self scanners now available.</p> <p>Pen-type readers, Laser scanners, CCD readers, Camera-based readers, Video camera readers.</p>

Question	Answer	Marks	Guidance
	<p><b>Ice Cream</b></p> <p>Ice cream became popular throughout the world in the second half of the 20th century after cheap refrigeration became common. There was an explosion of ice cream stores and of flavours and types. Vendors often competed on the basis of variety. Ice Cream Parlours were popular, particularly with the emerging youth culture, in the UK after WW2 and are still to be seen in seaside holiday towns. However in bigger towns and cities they tended to be replaced by Coffee Bars in the late 1950's.</p> <p>The connection of many homes to the National Grid in the 1940/50's provided the electricity needed to eventually run a fridge/freezer. Moving to the end of the 1960's, Ice Cream began to be available in supermarkets in 1 ltr tubs. Different varieties were available. It was easy to store and easy to serve. Popular with children so it has become one of the top deserts in many homes. There are many derivatives using Ice Cream with other ingredients: arctic roll, eskimo pie, and many additions to to give chocolate chip or crunchy ice cream.</p> <p>One important development in the 20th century was the introduction of soft ice cream. A research team in Britain discovered a method of doubling the amount of air in ice cream, which allowed manufacturers to use less of the actual ingredients, thereby reducing costs.</p>		<p><b>Knickerbocker Glory</b></p> <p>An ice cream <a href="#">sundae</a> that is served in a large tall glass, particularly in the United Kingdom. They were big, bright and colourful, with an eye catching individual look. Popular after WW2 when people looked to over-indulge themselves. The knickerbocker glory was first described in the 1930s and contains ice cream, jelly, and cream. Layers of these different sweet tastes are alternated in a tall glass and topped with different kinds of syrup, nuts, whipped cream and often a cherry. Layers of meringue, fruit and even alcohol may be included but, as with an ice cream sundae, there is no precise recipe.</p> <p>The name knickerbocker glory is drawn from knickerbockers, a type of long trouser traditionally worn by young children (but particularly young boys).</p> <p>Versatility of Ice Cream as a desert component, adding fruits and other ingredient, and the adding of flavours to the Ice Cream itself, expand the possibilities for more personalised deserts. It is almost always offered in restaurants as an option of cream, custard or ice cream with puddings and tarts.</p>



Question	Answer	Marks	Guidance
5 (a)	<p>One mark for each key specification point (4 x 1) No marks awarded for points identified in the question.</p> <p>Each point must relate <b>specifically</b> to the design situation.</p> <p><b>Examples:</b></p> <p><b>Coffee table:</b>      <i>Must be easy to keep clean and hygienic.</i></p> <p>                                 <i>Must be large enough to hold a minimum of 8 coffee mugs.</i></p> <p><b>Swimwear:</b>         <i>Must have red, white and blue colours</i></p> <p><b>Packaging:</b>        <i>Must be easy to open package.</i> <i>Must be easy to remove one chocolate at a time.</i></p> <p><b>Surface tester:</b>    <i>Must fit comfortably in one hand.</i> <i>Must have a warning signal when battery is low.</i></p> <p><b>Ice cream desert:</b> <i>Must include the shape of the Olympic flame.</i> <i>Must include the colours of the Union Jack.</i></p> <p><b>Not acceptable examples:</b> Must be fun Must be tasty Easy to use Needs to be safe</p> <p style="text-align: right;">4 x 1</p>	4	<p>A specification point is a positive statement about the form, the function, the user requirements, or the constraints of the situation.</p> <p>Together with the design need, the specification points should inform the design activity.</p> <p><b>Do not accept</b> one/two word <b>generic points</b> such as: good quality, strong, aesthetically pleasing, light/lightweight, bright, eye catching, colourful, bold, comfortable, environmentally friendly, recyclable, <b>without appropriate qualification.</b></p> <p>Examples: <i>Bold</i> (0) <i>Bold primary colours</i> (1). <i>Comfortable</i> (0) <i>Comfortable to wear</i> (1)</p> <p><b>Do not accept</b> '<u>no</u>' points: no sharp edges, not too big, not too heavy, not too costly (cheap), no small/loose bits, not lose shape in water.</p> <p><b>Do not accept</b> points extracted from the content of the question: eg Memphis style, Olympic theme, incorporate a laser, suitable as a desert.</p>

Question	Answer	Marks	Guidance
(b)	<p><b>Initial ideas</b></p> <p>Only <b>one</b> sketched solution with <b>no</b> accompanying notes (1)</p> <p><b>One</b> sketched solution <b>with</b> notes OR <b>Two or more</b> solutions with <b>no</b> notes (2)</p> <p><b>Two or more</b> sketched solutions <b>with</b> notes (3)</p> <p><b>A range</b> of different ideas that address at least <b>two</b> specification points (4)</p> <p>A <b>creative approach</b> to designing (5)</p>	5	<p><b>Marks can be awarded for addressing the specification points irrespective of the quality of the candidate's specification points given in (a).</b></p> <p><b>One word</b> labels can identify and name, features on a sketch: eg base, aluminium, pattern, seam.</p> <p><b>Two and three word</b> labels can qualify the feature: eg handle of wood, stable base.</p> <p><b>Notes</b> are complete statements that can explain, justify, exemplify and quantify the feature: eg 3mm red acrylic will be used for the sides and top.</p> <p>Dimensions on a drawing or sizes stated, and weights or quantities of ingredients come under the heading of notes.</p> <p><b>Different ideas</b> refers to:</p> <ol style="list-style-type: none"> <li>1. whole solutions or parts of a solution.</li> <li>2. conceptually different thinking.</li> <li>3. not just variations on a theme.</li> </ol> <p><b>Addressing specification points:</b></p> <ol style="list-style-type: none"> <li>1. may be explicitly evidenced in the notes.</li> <li>2. implicitly evidenced in the idea.</li> <li>3. the two specification points need to be evidenced only once each, in any of the notes or the ideas.</li> </ol> <p><b>Creative approach</b> to designing is judged in the context of an examination situation with strictly limited time. Do the ideas impress you enough for just ten minutes work from a 15 yr old?</p>



Question	Answer	Marks	Guidance
(c)	<p><b>Development of ideas – <u>must</u> reflect the product focus</b></p> <p>One solution may be presented in more than one view: top and front, inside and outside.</p> <p><b>One sketched solution</b> showing an idea from the initial ideas with some development – no notes (1)</p> <p><b>One developed idea</b> with notes (2)</p> <p><b>Development of an idea</b> evidenced with supporting sketches and or notes (3)</p> <p><b>Development</b> of an idea with notes that link to at least <b>two</b> specification points (4)</p> <p><b>A range of developments of the idea</b> with notes that link to at least <b>three</b> specification points (5)</p>	5	<p><b>In this part candidates must address the requirements of the “<i>design need in the situation</i>”.</b></p> <p>If <b>both</b> requirements of the design need are not met the maximum available is <b>two marks</b>.</p> <ol style="list-style-type: none"> <li>1. Coffee table <b>and</b> Memphis style.</li> <li>2. Swimwear <b>and</b> British Olympic.</li> <li>3. Chocolate Mints Package <b>and</b> accommodates 10 mints.</li> <li>4. Identifying levelness <b>and</b> a laser.</li> <li>5. Ice cream desert <b>and</b> Olympic Games</li> </ol> <p>For levelness device, <b>a system</b> (circuit or block diagram) must be shown. Where there is clear development <b>without a system</b> design <b>up to 2 marks</b> can be awarded.</p> <p><b>Where there are no creditable specification points in 5a maximum marks available are 2.</b></p> <p><b>To move beyond 2 marks there must be evidence on the page of developmental activity/decision making</b></p> <p><b>To obtain full marks candidates must consider their own specification.</b></p>

Question	Answer	Marks	Guidance
(d)	<p><b>Final proposal:</b> look at the information and drawing <b>on the page for 5d, and any</b> detail from 5c:</p> <p>A simple solution with limited detail/notes (1)</p> <p><b>Details</b> of one or more bullet points from the list of materials/parts/sizes/tools/etc. (1)</p> <p>Look at the <b>writing</b> on the page for <b>5d:</b></p> <p><b>Notes</b> and associated sketches showing how the design meets spec point 1 eg The coffee table is 800 long and 300 wide so there is plenty of room for the eight coffee mugs. (1)</p> <p><b>Notes</b> and associated sketches showing how the design meets spec point 2 eg The top is red, sleeves are white and the bottom blue for the British colours. (1)</p> <p><b>Notes</b> and associated sketches showing how the design meets spec point 3 eg The package is perforated along the top in a rectangular shape so that it can be opened easily with a finger nail. (1)</p> <p><b>Notes</b> and associated sketches showing how the design meets spec point 4 eg The desert contains red strawberry flavour, white vanilla flavour and blue blueberry flavour ice cream for the Union Jack colours. (1)</p>	6	<p>Candidates should show <b>any</b> (not all) relevant <b>details</b> for manufacture:</p> <ul style="list-style-type: none"> <li>• materials/ingredients/components.</li> <li>• sizes / dimensions / quantities,</li> <li>• methods / joining / mixing techniques,</li> <li>• tools / equipment,</li> </ul> <p><b>Accept</b> justified points related to the candidates' <b>own specification</b>, even if not rewarded in 5(a).</p> <p><b>If</b> solution in 5(d) has no relationship with 5(c) then only award up to 4 marks for the justifications of how the idea meets their specification.</p>

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