
GCSE

Design and Technology:

Textiles Technology

Unit 1 – Written Paper
Mark scheme

4570
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Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' 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.

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Section A

1	(a)	<p>Give two ways that mood boards can inspire design ideas.</p> <p>Ideas for colour, pattern, shape, texture, style, fabrics, components, scale, decorative techniques. No to pictures/images/ideas</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 2 different ways, 1 mark each 1 mark 	[2 marks]
1	(b)	<p>Sketch two different initial design ideas for a textile product.</p> <p>There are 6 marks for each design idea.</p> <ul style="list-style-type: none"> Creativity and originality of idea based on the theme Use of a range of fabrics and components Quality of notes and sketches <p>Up to 6 marks for each design idea. Two sketches to show different initial ideas for a textile product. Candidates should not be penalised if they use a pen. Designs should be neat and clear for full marks. If both ideas are similar, mark first as it stands; alter second (max 4 marks).</p> <p>Marks awarded as follows:</p> <p>Creativity and originality of idea based on theme:</p> <ul style="list-style-type: none"> No answer worthy of credit 0 marks A design that is inspired by the theme of marine life 1 mark Imaginative design that is highly creative and original with inspiration taken from the theme of marine life 2 marks <p>Use of a range of fabrics and components:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks One or more named fabrics and/or components with little or no detail given. 1 mark More than one named fabric and/or component with some detail to show effective use on textile product. 2 marks <p>Quality of notes and sketches:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Little or no annotation, fairly well presented sketch. 1 mark Candidate will communicate ideas very clearly with excellent presentation and annotation. 2 marks 	[12 marks]

1	(c)	<p>Give one way of developing your textile product so that it promotes conservation of marine life.</p> <p>An example is given below:</p> <p>Include sustainable fabrics and components in your design.</p> <p>Include in the design a conservation logo, add a product label with conservation message, write/print/embroider a slogan on product to promote conservation, include packaging that promotes conservation.</p> <p>No to any repeats of sustainable fabrics/components/techniques e.g. recycled fabric – see list of sustainable fabrics 1(d). No to biomimetic/fastskin.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for any appropriate way of promoting conservation in the design of the product. 1 mark 	[1 mark]
1	(d)	<p>Use sketches, labelling and notes to present a final design in colour for your textile product. Include components inspired by the theme and sustainable fabrics in your design.</p> <p>Marks will be given for:</p> <ul style="list-style-type: none"> Creativity and quality of design including decorative techniques 5 marks use of a range of fabrics including sustainable fabrics 4 marks use of components inspired by the theme 3 marks effective use of colour 3 marks presentation of final idea including different views of textile product 2 marks <p>Creativity and quality of design including decorative techniques:</p> <p>The following should be considered:</p> <p>Is the design a contemporary, creative, original and imaginative design for a textile product, with balanced composition/effective use of space, effective proportions? Do design features include decorative techniques which are appropriate for intended use and fabrics selected? Will the design work?</p> <p>Decorative techniques may include any dyeing, and painting techniques e.g. batik, tie dye; any printing or stencilling technique e.g. block printing, sublimation printing; any decorative stitch work e.g. appliqué, hand embroidery, machine stitching, quilting; fabric manipulation e.g. patchwork, smocking, pleating, gathering, frills, heat setting; adding trims/sequins/buttons/beads/decorative components/motifs/LED bulbs etc.</p>	

		<p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Unimaginative simple design with some thought given to intended use though lack of detail. Relates to some areas of design brief but may not be clear, overall balance weak. May include a decorative technique. 1 mark Fairly good design related to many aspects of design brief with some detail about textile product. Design might lack imagination. There may be some lack of clarity about materials. One or more decorative techniques but little detail shown. An existing design may have been copied. 2 marks Very good design that relates to most aspects of design brief with some detail and thoughtful or imaginative use of one or more decorative techniques which are appropriate for the textile product. Little evidence that an existing design has been copied. 3 marks Imaginative design that clearly relates to most aspects of design brief with clear detail and exciting use of more than one decorative technique. Decorative techniques are appropriate and add interest to the textile product. Little evidence that an existing design has been copied. 4 marks Very original, innovative and highly creative detailed textile product with a variety of effective decorative techniques. This would be a very unique and popular design. Design clearly relates to most aspects of design brief. 5 marks <p>Use of a range of fabrics including sustainable fabrics:</p> <p>Fabric characteristics and properties will be taken into consideration including aesthetics such as colour, pattern, texture etc. Is fabric appropriate to the specific textile product designed?</p> <p>Sustainable fabrics: -</p> <ul style="list-style-type: none"> may be recycled/reclaimed from deconstructed products made from recycled plastic/polyester from end of fabric rolls or waste fabric organic or fairtrade cotton biodegradable fabric modern fabric which has less impact on the environment e.g. Tencel biofibres which can be grown sustainably e.g. bamboo fabric may have easy-care finishes that will reduce laundering natural fibres that have no toxic chemicals e.g. bleach, toxic dyes ahimsa/peace silk reduced carbon emissions in distribution e.g. fabric made locally. 	
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		<p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks One or more fabrics that may not include a sustainable fabric or is used inappropriately. 1 mark Two or more fabrics that do not include a sustainable fabric 2 marks Two or more carefully selected fabrics with some regard to sustainability 3 marks A range of thoughtfully selected fabrics that include one or more sustainable fabrics. 4 marks <p>Use of components inspired by the theme:</p> <p>Decorative or functional components such as beads, sequins, threads, trims, lace, interfacing, wadding and fastenings, electronic components include batteries, LED lights, music/sound/light/movement/scent release devices, tracking/recording/monitoring/connection to the internet etc.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks One or more basic components 1 mark More than one component, including one that reflects the theme in appearance, material it is made from, or function 2 marks A range of appropriate and thoughtfully selected components including at least one that reflects the theme in appearance, material it is made from, or function 3 marks <p>Effective use of colour:</p> <p>This is not about colouring in of the design idea. The following should be considered - how has colour been used? Are the colours toning, contrasting, complementary? Do they work for the textile product? Do they promote the marine life theme? Do they make the textile product exciting and appealing?</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Use of colour is immature and not used to effect or colours are described in written notes only. 1 mark Choice is used well but does not make the textile product exciting or colours chosen without specific link to the theme. 2 marks Colours used effectively/imaginatively, mature and sensitive choice. 3 marks <p>Presentation of final idea including different views of textile product:</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Simple presentation, quality of drawing and labelling and information about textile product is mostly clear. 1 mark Candidate has taken care with presentation, quality of drawing and labelling and information about the textile product is clear and is shown from more than one point of view. 2 marks 	[17 marks]
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1	(e)	<p><i>Your textile product will be on sale in marine life centres nationwide. Explain how you can change your design so that it is more suitable for batch production.</i></p> <p>Accept answers concerning the design of the product and how it would be manufactured. Reduce number of different decorative techniques or complexity of construction. Replace hand crafted techniques with machine or computer aided manufacture. Use less challenging fabrics and components. Do not give marks to answers that only refer to reducing costs without an explanation e.g. 'make it cheaper'. No to changing size.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> • No answer worthy of credit. 0 marks • Simple answer that refers to one way of changing design 1 mark • More detailed answer that may give one or more than one way of changing design 2 marks • Very detailed answer that gives two or more ways of changing design 3 marks 	[3 marks]
2	(a)	<p>(i) <i>The tents are designed for two different types of people. Give the target market and intended use for each tent.</i></p> <p>Tent A: adult/family, with some indication of use hiking/mountaineering/outdoor sports/camping/festival camping, sleeping in.</p> <p>Tent B: child (mark given for either 'girl' or 'boy'), with some indication of age eg 2-6 years, for play/camping inside.</p> <p>No to just 'people'.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> • No answer worthy of credit. 0 marks • Basic answer such as adult and child, 1 mark for each answer • More detailed answers, 2 marks for each answer 	[4 marks]

2

(a)

(ii)

Fill in the table below to show **three** comparisons between the design of Tent A and the design of Tent B.
One example has been completed for you.

Ground sheet incorporated	No ground sheet/tent bottom
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Tent A	Tent B
Water/weather proof fabric	Decorative fabric/not waterproof
Mesh/screen /window at front	No mesh/screen/window
Inner and outer tent/fly sheet/extra roof or top	Outer tent only
Plain colours	Patterned/printed fabric
Tent poles pegged into ground/metal poles or frame	Free standing frame/plastic poles or frame
Door zip fastening	Door tie fastening/velcro
Igloo/dome shape	Tepee/Wigwam shape
Tent hangs from the curved tent frame/poles	Tent over top of frame
Practical shape/headroom/large	No headroom/little space inside/small
Range of fabrics	Single fabric

No to types of fabric.

Marks awarded as follows:

- No answer worthy of credit.
- 1 mark for each correct comparison


0 marks
up to 3 marks

[3 marks]

2	(b)	<p><i>Tents A and B use different fabrics and finishes. Name a different suitable fabric and finish for Tent A and Tent B.</i></p> <p>Do not reward for repetition of fabric and finish</p> <p>Tent A</p> <p>Fabrics: nylon/polyester/Gortex</p> <p>No to plastic, laminated</p> <p>Finishes: water proof/wind resistant/silicone/flame retardant finish/hydrophobic/fungicidal /nanotechnology UV protection finish/fluorescent/phosphorescent</p> <p>Tent B</p> <p>Fabrics: cotton/calico/canvas/polyester/nylon/polyester cotton</p> <p>No to acrylic, linen, viscose</p> <p>Finishes: stain/crease resistant/flame retardant finish /nanotechnology UV protection finish/Teflon™/antibacterial.</p> <p>No to brushed, waxed.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks For each tent: 1 mark for naming the fabric, 1 mark for giving a suitable finish. Fabrics A and B and finishes A and B must both be different from each other. If incorrect fabric but correct finish a mark can be awarded for the finish. 	[4 marks]
2	(c)	<p><i>List four components included in a tent.</i></p> <p>Poles, rubber bands, pegs, bag, zip, Velcro, pre-manufactured logo, label, thread, tape, ground/waterproof/plastic sheet, ties, rings/'s' rings/hooks/eyelets/ropes, toggles, press studs, eyelets and/or laces.</p> <p>No to buttons, boning, buckle, nails, mesh.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for each different component, up to 4 marks. 	[4 marks]

2	(d)	<p><i>Give two ways to test a tent.</i></p> <ul style="list-style-type: none"> • Test against the design/product specification. • User trial. • Target market questionnaire/opinion/focus group. • Test against/comparison with similar existing product. • Practical tests e.g. test water resistance/proof, test stability/wind resistance/strength, speed/ease of putting up, test flammability, test for adequate ventilation, test if zip works. <p>If 2 practical tests given, then max 1 mark for both tests. No to 'prototype'.</p> <p>Marks awarded as follows: No answer worthy of credit. 1 mark for each correct test method, up to 2 marks.</p> <p style="text-align: right;">0 marks</p>	[2 marks]
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3	(a)	<p><i>Describe some dyeing, printing and surface decorative techniques that could be used to add colour and texture to different parts of the dress. Include some suitable fabrics and decorative components.</i></p> <p>The following techniques may be mentioned: -</p> <ul style="list-style-type: none"> • Any dyeing, and painting techniques e.g. batik, tie dye, silk painting • Any printing or stencilling technique e.g. block printing, sublimation/heat press printing, screen printing • Any decorative stitch work e.g. appliqué, hand or machine embroidery, free machine stitching, quilting • Fabric manipulation e.g. patchwork, smocking, pleating, gathering, frills, heat setting • Any named or described fabrics and fabric combinations • Adding trims/sequins/buttons/beads/decorative components/motifs/LED bulbs etc. <p>Techniques should be given, not just 'dyed' or 'printed' as this is a repeat of the question. Candidates do not have to refer to examples of all three techniques (dyeing, printing and surface decorative techniques) to gain full marks.</p>	
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			<p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Simple statements or those that only include one or more basic techniques for adding features, colour, pattern and texture. Candidate will tend to concentrate superficially on only a few ideas and offers little information, little variety in or detail about techniques suggested. There may be some confusion. Candidate may refer only to colour. Response is structured poorly with little or no use of Design and Technology terminology and with numerous errors in grammar, punctuation and spelling 1-2 marks More detailed information. May only include a few techniques for adding features, colour, pattern and texture but some variety is described. This candidate has some understanding of how colouring and texture is created and may refer to fabrics and components. Response is fairly well structured with some use of Design and Technology terminology and with a small number of errors in grammar, punctuation and spelling 3-4 marks Sound understanding of a variety of techniques with detailed information about adding features, colour, pattern and texture to the dress. Fabrics and/or components are described or named and are appropriate. Response is well structured with good use of appropriate Design and Technology terminology and shows a good grasp of grammar, punctuation and spelling. 5-6 marks Excellent understanding of a wide variety of techniques with accurate and detailed information. Candidate will refer to appropriate fabric and component choice linked to technique. Response is well structured with good use of appropriate Design and Technology terminology and shows a good grasp of grammar, punctuation and spelling. If bullet points are used to structure answer, then full, detailed sentences must be employed. 7-8 marks 	[8 marks]
3	(b)		<p><i>Circle the correct symbol shown below for the decorative dress care label.</i></p>  <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Correct answer – hand wash symbol. 1 mark 	[1 mark]

3	(c)	<p><i>Explain why the symbol you have circled shows the most suitable wash care instruction for the dress</i></p> <p>Refers to the dress described in 3(a). Fabric which is dyed, printed and has surface decorative techniques should not be washed or ironed at a very high temperature as the fabric/components will be damaged/might shrink dress/colour may fade. Hand washing is less vigorous/more care taken/gentle. The lion symbol is used on children's toys and therefore not appropriate for the dress.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Basic answer such as 'will not damage fabric'. 1 mark More detailed answer referring to fabric and/or components that will be damaged by the high wash/iron temperature/vigorous wash shown in the wash care symbols. Or more detailed answer that refers to the use of the lion symbol for toys. 2 marks <p>If answer to 3(b) is 'hot iron' and the correct reason is given in 3(c) e.g. hot iron to press pleats into place, then award 1 mark.</p>	[2 marks]
3	(d)	<p><i>Use notes and diagrams to explain one dyeing, printing, or surface decorative technique.</i></p> <p>Marks awarded as follows: May refer to classroom or commercial techniques. If name of technique is wrong for the equipment, notes and diagrams shown, then up to 5 marks can given.</p> <p>Name of technique</p> <ul style="list-style-type: none"> No answer worthy of credit; notes and diagrams show a different technique 0 marks Correct name for technique shown in notes and diagrams 1 mark <p>Equipment needed</p> <ul style="list-style-type: none"> No answer worthy of credit 0 marks More than 1 item of equipment – may appear as list or in notes or diagrams. 1 mark <p>Step-by-step instructions</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Explanation of method is adequate. 1 mark Accurate explanation of method. Candidate understands method and can clearly explain it. 2 marks 	

			<p>Quality of notes and sketches</p> <ul style="list-style-type: none"> No answer worthy of credit 0 marks Basic detail, simple diagrams, few steps, notes only or diagrams with no notes/labels. 1 mark Detailed diagrams with clear labels, neat presentation 2 marks 	[6 marks]
4	(a)		<p><i>The trouser fabric fibre content is 96% nylon and 4% elastane. List three advantages of this fibre content.</i></p> <ul style="list-style-type: none"> Stretch/flexibility/ease of movement/comfort Durability/hardwearing/lasts longer Strength Easy care/washes easily/quick dry Water repellent/not absorbent Wicking Lightweight Resists bacteria Reasonably inexpensive/cheap Crease resistant <p>No to breathable, warm, waterproof</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for each correct advantage, up to 3 marks. 3 marks 	[3 marks]
4	(b)	(i)	<p><i>The trousers are made from woven fabric. Tick the box to show the method of woven fabric construction.</i></p> <div data-bbox="312 1541 632 1861" data-label="Image"> </div> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Correct box ticked 1 mark 	[1 mark]

4	(b)	(ii)	<p><i>What is the name of this weave?</i></p> <p>Twill No to woven/weave – repeat of question.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for correct answer 1 mark 	[1 mark]
4	(b)	(iii)	<p><i>Give two reasons why this is a suitable method of fabric construction for outdoor work trousers.</i></p> <p>Durable/hardwearing, strong, uv protection, wind protection/windproof, breathable, doesn't snag easily. No to stretch.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for each correct answer, up to 2 marks. 2 marks <p>If both 4(b)(i) and 4(b)(ii) incorrectly refer to knitted fabric however, the answers for 4(b)(iii) are correct in relation to knitted fabric, then marks can be awarded for 4(b)(iii).</p>	[2 marks]
4	(c)		<p><i>Explain how the style of the trousers could be improved to make them more suitable for outdoor work.</i></p> <p>This question is about trouser style, not fabric choice.</p> <p>More pockets, move pockets, pockets with fastenings, bellowed/large pockets, loops to clip equipment onto trouser, elastic waist, popper/snap/press stud fastening at waist, zip off legs/convertible to shorter length/shorts/rolled up legs, knee pads/protection/layers of fabrics, add braces, triple stitched seams, taped seams, built in belt, removable lining, not tight fit/narrow at ankle.</p> <p>No to colour or fabric choice improvement, finishes, trims.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Basic answer with one style modification. 1 mark More than one style modification or one given with some detail eg: pocket with Velcro fastening. 2 marks More than one detailed style modification with some explanation. 3 marks Two or more different detailed style modifications with clear explanation. 4 marks 	[4 marks]

4	(d)	<p>Name or describe two different fabrics that could be used to make the trousers safer for working outdoors. Explain how each fabric makes the trousers safer.</p> <p>This question is about safety, not comfort.</p> <ul style="list-style-type: none"> • High vis, reflective, fluorescent – To make the worker more visible • Kevlar, carbon fibre, Cordura – To protect worker from impacts/cuts, stab/bullet proof, friction, abrasion, tear resistant • D30 – To protect worker from impacts • Nomex – To protect worker from high temperatures/flame resistant/burns • BioSteel – Resistant to extreme temperatures • Gortex/waterproof PVC coated fabric – To protect worker from wet and cold • Chemical resistant fabric – To protect worker from toxic chemicals • Polyester – flame retardant/resistant/low flammability <p>No to denim, cotton drill, photochromic, thicker fabric.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> • No answer worthy of credit. 0 marks • 1 mark for each named or described fabric up to 2 marks. 2 marks • 1 mark for each correct reason relevant to named/described fabric, up to 2 marks. 2 marks 	[4 marks]
4	(e)	<p>Discuss how electronic devices in the trousers would improve the wearer's safety or comfort.</p> <p>Points relating to electronic devices such as GPS, automatic stop for chainsaw use, heating/cooling system, computer/keyboard, mobile phone, music player, speakers, wired up for Bluetooth so clothing lights up with incoming call, solar panel/battery charger, LED lights, airbag activated by impact, CO2 sensor, monitoring device for health of worker/heart monitor, monitoring location/clocking in/working hours.</p> <p>No to phosphorescent/see in the dark.</p> <p>Max 3 marks if no devices named but detailed discussion of safety and comfort.</p>	[4 marks]

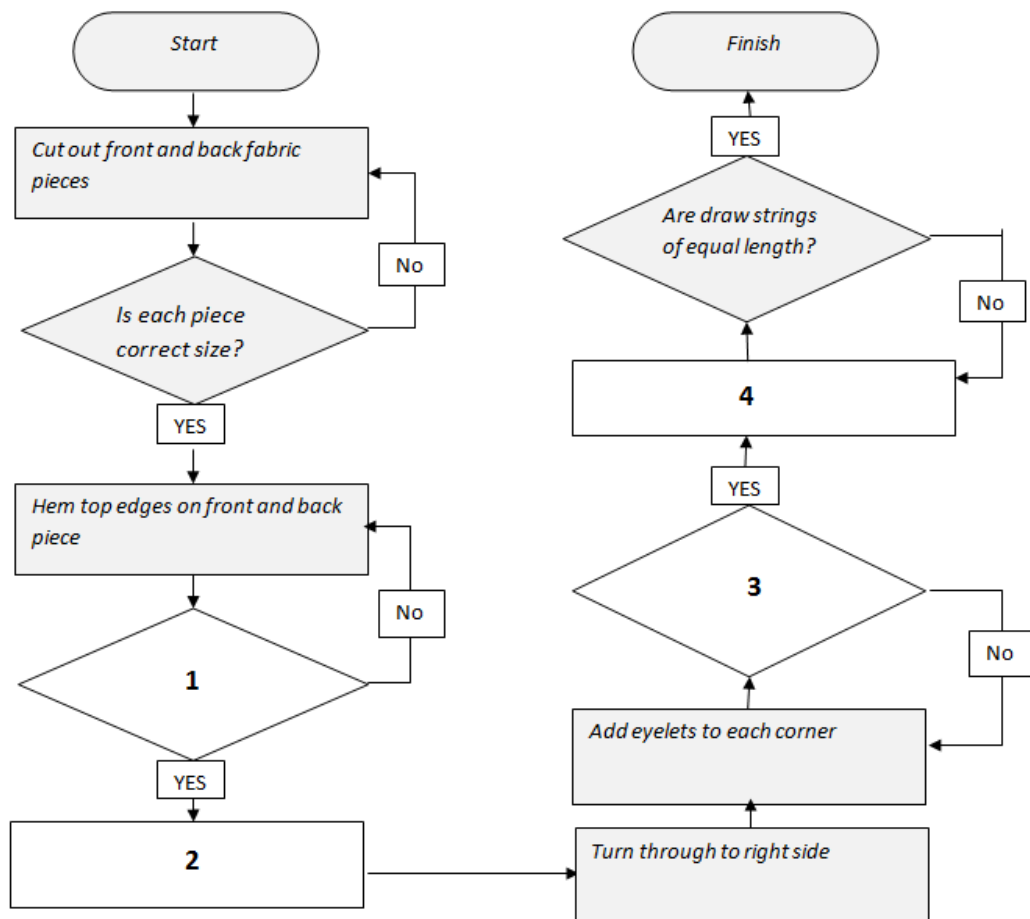
			<p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks <i>Basic answer with one electronic device.</i> 1 mark <i>Basic answer with two electronic devices or one with more detail.</i> 2 marks <i>Two detailed electronic devices, candidate may link to device use in trousers and reason for safety or comfort. Or list of three or more electronic devices.</i> 3 marks <i>Three or more detailed electronic devices, candidate explains their use in trousers and reason for safety or comfort.</i> 4 marks 	
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5	(a)		<p>Circle the correct method of large volume production.</p> <p>Mass</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Correct answer - mass 1 mark 	[1 mark]
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5 (b) (i)

Complete the flow chart to show the stages of production and the quality control checks.

Some boxes have been filled in.



Marks awarded as follows:

No answer worthy of credit.

0 marks

Empty box 1: Is the stitching straight? Hem correct size? Stitches correct length? Measurements accurate? Stitching neat/secure? Edges hemmed?

No to 'Done properly?', 'Edges neat?', 'hemmed correctly'.

Any correct answer

1 mark

Empty box 2: Stitch front to back

No to 'Wrong sides together'

1 mark

Empty box 3: Are eyelet in the right place? Fixed together securely? In good condition? Correct colour/size?

1 mark

Empty box 4: Cut draw strings/cords and insert/Insert draw strings/cords.

No to just 'Cut draw strings'

1 mark

[4 marks]

5	(b)	(ii)	<p>Give three reasons why product manufacturers use flow charts.</p> <ul style="list-style-type: none"> • So that order of making is logical/efficient • Gives simple step by step instructions simply/clearly communicates instructions for making • So they don't miss anything out/reduces mistakes/corrects mistakes • To monitor quality of made pieces • To help meet schedules/deadlines • So all the pieces are made in the same way • To include feedback loops to indicate which stage to return to if a problem is found/incorporate quality control checks. <p>No to show equipment/materials needed, to develop/modify/alter design, to include safety, to just 'easier' without explanation.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> • No answer worthy of credit. • 1 mark for each different correct reason up to 3 marks 	<p>0 marks 3 marks</p> <p>[3 marks]</p>
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5	(c)	(i)	<p>Suggest three design modifications to meet this school's requirements and state the reason for an increase in production cost.</p> <p>One example has been done for you.</p> <table><tr><td>Top stitching around sides and bottom of bag to reinforce seams.</td><td>Higher cost because extra stitching takes longer and uses more thread.</td></tr></table> <table><tr><th>Design feature</th><th>Reason for increase in production cost</th></tr><tr><td>Stronger/thicker fabric</td><td>More expensive fabric, that might require thicker thread for stitching</td></tr><tr><td>Water proof fabric</td><td>Extra finish or more expensive fabric</td></tr><tr><td>Thicker/stronger draw string cord</td><td>More expensive cord/fibre content</td></tr><tr><td>Thicker/more sturdy eyelets</td><td>More expensive eyelets, might need different machine parts to apply them</td></tr><tr><td>Tag for pass</td><td>Tag will need to be made using extra fabric and thread and taking more time/extra stage in production</td></tr><tr><td>Pocket/plastic sleeve for pass</td><td>Pocket will need to be made using extra fabric and thread and taking more time/extra stage in production</td></tr><tr><td>Pocket with Velcro/zip fastening</td><td>As above and extra cost of fastening</td></tr><tr><td>Printed/heat pressed/embroidered school logo</td><td>Extra stage in production/time/specialist labour or machine, extra cost of thread</td></tr><tr><td>Patch of fabric to reinforce eyelet area</td><td>Extra fabric cut out and stitched into place</td></tr><tr><td>Overlock seams</td><td>Extra thread/time/equipment needed</td></tr></table>	Top stitching around sides and bottom of bag to reinforce seams.	Higher cost because extra stitching takes longer and uses more thread.	Design feature	Reason for increase in production cost	Stronger/thicker fabric	More expensive fabric, that might require thicker thread for stitching	Water proof fabric	Extra finish or more expensive fabric	Thicker/stronger draw string cord	More expensive cord/fibre content	Thicker/more sturdy eyelets	More expensive eyelets, might need different machine parts to apply them	Tag for pass	Tag will need to be made using extra fabric and thread and taking more time/extra stage in production	Pocket/plastic sleeve for pass	Pocket will need to be made using extra fabric and thread and taking more time/extra stage in production	Pocket with Velcro/zip fastening	As above and extra cost of fastening	Printed/heat pressed/embroidered school logo	Extra stage in production/time/specialist labour or machine, extra cost of thread	Patch of fabric to reinforce eyelet area	Extra fabric cut out and stitched into place	Overlock seams	Extra thread/time/equipment needed	
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			<p>No to add straps</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for each correct and different design feature, up to 3 marks 1 mark for each correct reason for increase in production cost, up to 3 marks. If all the 3 reasons are the same then only 1 mark. 	[6 marks]
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5	(c)	(ii)	<p><i>Circle the correct method of production for the school's stronger draw string bag.</i></p> <p>Batch</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit 0 marks Correct answer -batch 1 mark 	[1 mark]
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5	(d)	(i)	<p><i>Explain how Computer Aided Design (CAD) can reduce costs.</i></p> <p>This question is about designing. Photography, scanning, drawing or modifying existing designs are quicker/cost efficient/more accurate methods of starting/developing a design. Designs can be stored digitally, so less storage needed for hard copies. Presentation of design quicker/can be sent by email, less skill needed, fewer designers needed. Modifications can be made more quickly, design can be linked to sampling/production saving time and machine set up costs. No to less equipment needed.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Basic answer refers to quicker or more accurate 1 mark More detailed answer with one or more points with some explanation of reduction in costs. List of 3 or more points with no explanation. 2 marks Two or more points with detailed explanation. 3 marks 	[3 marks]
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5	(d)	(ii)	<p><i>Explain how Computer Aided Manufacture (CAM) can reduce costs.</i></p> <p>This question is about manufacturing. Increase in efficiency, changes in production made more rapidly, accuracy increases reducing errors and wasted materials/seconds, efficient lay plans or work scheduling/planning, quicker production speeds, automatic processes quicker, processes, monitoring quality or tracking production less labour intensive, multiple processes carried out at same time.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks Basic answer refers to quicker or less waste 1 mark More detailed answer with one or more points with some explanation of reduction in costs. List of 3 or more points with no explanation. 2 marks Two or more points with detailed explanation. 3 marks 	[3 marks]
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6	(a)		<p><i>Football shirts sometimes display logos advertising alcohol or online betting brands.</i> <i>Explain why some people are against these logos.</i></p> <p>Some people are against advertising/promoting/encouraging people to drink alcohol or to gamble. Football appeals to families and it is seen by some as unsuitable to advertise/promote alcohol/gambling to children. Footballers are seen by many as heroes/role models and some people might consider it is inappropriate that footballers are wearing the advertisements. Some people might think that sport is a healthy activity and alcohol is not part of a healthy lifestyle. Drinking alcohol is against some religious/cultural beliefs.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> No answer worthy of credit. 0 marks 1 mark for each correct point up to 3 marks or 3 marks for 2 points and expansion of one point. 3 marks 	[3 marks]
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6	(b)	<p><i>Football fans often support their clubs by wearing the latest football shirts. Some football shirts are made in the Far East and cost £90. Discuss why this may be a moral and social issue.</i></p> <ul style="list-style-type: none"> • £90 for a football shirt is expensive for a football supporter to afford each season in order to keep up to date with team strip. Some companies justify the price of the football shirt by pointing to the high costs of research and development that goes into the kits and fabric technology. Some people believe that the game's traditional fan base is being edged out by the growing costs of being a supporter. • Peer group pressure to have the latest football shirt might put pressure on parents to buy the latest football shirt which they may not have the money for in the family budget. Supporters without the latest shirt may be bullied. 'Fast fashion' items are wasteful because they are quickly discarded in favour of the next latest fashion. • Some factories in the Far East are considered to be sweat shops where child labour, poor and sometimes dangerous working conditions and perhaps abusive treatment of workers is evident. Some people wish to buy ethical football shirts which reflect the moral values of society. They believe that a fair price should be paid to producers and factories should produce fairtrade clothing. • One sweatshirt may sell for over a third of what a worker might earn for a month. Some companies make huge profits from workers in some developing countries, but sometimes fail to ensure a living wage for the workers. • A footballer might make thousands of pounds a week for kicking a football whereas those who make the shirt on his back can sometimes take home the average hourly rate of just 30p. However, some workers might prefer to receive less pay rather than suffer loss of their jobs. • Sometimes no expense is spared on company headquarters; some directors are paid very high salaries in contrast to conditions in some factories in the Far East and wages of some factory staff and workers. • High price of the latest football shirt may encourage counterfeits. <p>No to environmental issues such as pollution, carbon footprint, shipping distances and fuel consumption.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> • No answer worthy of credit. 0 marks • Basic answer referring to high price of football shirt. 1 mark • One or more simple points in addition to the high price of the shirt. 2 mark • One or more detailed points made in addition to the high price of the shirt. 3 marks • More than one detailed point made there may be some reference to the complexity of a football shirt/reason why football shirts are expensive. Candidate shows more in depth understanding of the issues. 4 marks 	[4 marks]
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6	(c)	<p><i>Some football shirts are made from 96% recycled polyester and 4% organic cotton. Explain why this fibre content is sustainable.</i></p> <p>Polyester fabric and plastic bottles can be recycled and made into new polyester fabric.</p> <p>Depletion of natural resources/fossil fuels running out is lessened by recycling. Polyester clothing and plastic bottles are not put into landfill or incinerated but are recycled/reused, thus lessening impact on environment.</p> <p>Organic cotton grown without pesticides, herbicides or toxic fertilisers/toxic chemicals/ grown naturally has less impact on the environment. It is safer for the cotton workers and consumers of the cotton product. The fibre might also be fair-trade cotton.</p> <p>No to just 'no chemicals', to blends reducing costs.</p> <p>Marks awarded as follows:</p> <ul style="list-style-type: none"> • No answer worthy of credit. 0 marks • Reference to eco-friendly fabric/environmentally friendly or knows what is meant by either recycled polyester or organic cotton 1 mark • Reference to eco-friendly fabric/environmentally friendly and knows what is meant by either recycled polyester or organic cotton 2 marks • Reference to eco-friendly fabric/environmentally friendly and knows what is meant by both recycled polyester and organic cotton 3 marks • More detailed understanding of impact on the environment and there may be some reference to ethical issues and knows what is meant by both recycled polyester and organic cotton. 4 marks 	[4 marks]
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