



GCSE MARKING SCHEME

SUMMER 2018

**DESIGN & TECHNOLOGY - TEXTILE TECHNOLOGY
4131-01**

INTRODUCTION

This marking scheme was used by WJEC for the 2018 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GCSE DESIGN & TECHNOLOGY - TEXTILE TECHNOLOGY

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Question		SECTION A		On paper	Question Totals	Overall TOTAL
1	(a)	No answer or an incorrect answer. Only acceptable answer: Children form one year upwards.	0 1	1	1	
	(b)	No answer or an incorrect answer. Answers that indicate an understanding of the set retail price based on: It is affordable for parents with young children who may be on a budget; it offers good value for money as it doubles as a toy; it may be of limited use over a period of time so price is reasonable. A reasonable price to pay to encourage children to keep the car clean. A one mark answer It is affordable. Two mark answer It is affordable for parents with young children who may be on a budget.	0 1 2	2	2	
	(c)	No answer or an incorrect answer. Answers that indicate an understanding of the properties of the materials can be awarded up to two marks for each explanation based on: Velour: soft texture; feels cuddly and soft; tactile for children; quite durable; washable. Proofed Polyester: can be wiped clean; washable; tough; strong; durable. A one mark answer Easy to keep clean. A more developed response for two marks: as it's proofed it can be kept clean – easy to wipe clean.	0 1 2	2x2	4	
	(d) (i)	No answer or an incorrect answer. Answers that indicate an understanding of the main function can be awarded one mark for each correct answer based on: <ul style="list-style-type: none"> • It is to collect litter in the car. • It is to encourage children to stop dropping litter. • To teach children to be more environmentally aware. • It doubles as a toy. 	0 1 1	1 + 1		

Question		SECTION A		On paper	Question Totals	Overall TOTAL
	(ii)	<p>No answer or an incorrect answer.</p> <p>Answers that indicate an understanding of the appearance supporting the function can be awarded up to four marks based on: It is an appealing character; children would be amused by the features; it is a friendly face; children would be intrigued to see how big his tummy can grow so will be encouraged to fill it with rubbish; It is very tactile so children will want to interact with it; it is small enough to be portable – it looks cuddly even if it is a litter bin.</p> <p>A one mark answer: It's quite funny.</p> <p>A satisfactory response for two marks: Its quite funny looking so it will appeal to children.</p> <p>A good response with some reasoning for three marks: It's quite funny looking and it is also quite soft, so it will appeal to children. They will want to use it.</p> <p>A detailed fully explained for four marks: As it is quite a funny character and its quite soft and cuddly, children will be drawn to it and will want to interact with it, i.e. put their rubbish in its tummy!</p> <p>A list of features with no elaboration award a maximum of 2 marks; for full marks points need full explanation.</p>	1 2 3 4	4	6	
	(e)	<p>No answer or an incorrect answer.</p> <p>Award one mark for an incorrect answer but method is correct.</p> <p>Correct answer with calculations: two marks.</p> <p>Orange: total sales $150 \div 4 = 37.5$</p> <p>Award one mark for a correct answer but NO CALCULATIONS!</p>	0 2	2	2	
					15	15

Question		SECTION A		On paper	Question Totals	Overall TOTAL
2	(a)	No answer or an incorrect answer. Only acceptable answers: <ul style="list-style-type: none"> • Kitemark. • Mobius loop. 	0			
			1			
			1	2	2	
	(b)	(i)	0			
			1			
			2	2		
		(ii)	0			
			1			
			2			
			3	3		
		(iii)	0			
			1			
			2			
			3	3	8	
					10	25

Question			SECTION A		On paper	Question Totals	Overall TOTAL
3	(a)	(i)	No answer or an incorrect answer. Only acceptable answers: PICTURE 1: STELLA McCARTNEY PICTURE 2: MATTHEW WILLIAMSON	0 1 1	2		
	(b)		No answer or no relevant issues described or discussed. Answers must indicate a general understanding of the MAIN DIFFERENCES and DESIGN THINKING in the style of both designer's work. STEP 1: Award one mark for each relevant fact up to eight marks. STEP 2: Assess QWC as follows: The maximum mark that can be awarded is eight. 1. If QWC band is 4 – move D&T mark up 2 if that is possible. 2. If QWC band is 3 – make no change. 3. If QWC band is 2 – move D&T mark down 1 mark. 4. If QWC band is 1 – move D&T mark down 2 marks.	0			
			STEP 2: THEN ASSESS THE QUALITY OF WRITTEN COMMUNICATION				
			Quality of Written Communication is limited, presenting material with limited coherence, many errors of grammar, punctuation and spelling.	Band 1			
			Quality of Written Communication is basic, presenting occasionally appropriate material with some coherence, some errors of grammar, punctuation and spelling.	Band 2			
			Quality of Written Communication is good, presenting mainly appropriate material in a coherent manner, few errors of grammar, punctuation and spelling.	Band 3			
			Quality of Written Communication is excellent, presenting wholly appropriate material in a coherent and logical manner, hardly any errors of grammar, punctuation and spelling.	Band 4			
			Answers MUST describe the differences in each designer's style and elements that influence their design thinking. <ul style="list-style-type: none"> • Both parts of the question must be answered for full marks. • No marks are awarded for personal details. <p>Look for direct differences and the use of connectives indicating a difference – adjust marks in QWC.</p> <p><u>Award up to 8 marks based on 4 fully explained direct differences/comparisons.</u></p>				

Question		SECTION A		On paper	Question Totals	Overall TOTAL
		<p>MATTHEW WILLIAMSON: Main features of his work</p> <ul style="list-style-type: none"> • MW has a romantic approach to his creations. (THINKING & STYLE) • He is passionate about his designs with the aim that people will like to wear them. (THINKING) • Williamson’s creations are wearable for most women.(STYLE) • MW believes the woman is the statement not the clothes, a free spirit, Bohemian. (THINKING) • MW gains a lot of his inspiration from travel across the globe e.g. Morocco and India colourful landscapes as well as nature and plants this is reflected in his work (STYLE & THINKING) • MW uses patterns on his more romantic colourful creations often made from silk or chiffon. (STYLE) • MW is known mainly for his colourful print designs which reflect nature but also for the use of embroidery enhanced by beading, etc. (STYLE) 	4			
		<p>STELLA McCARTNEY: Main features about her work.</p> <ul style="list-style-type: none"> • SM describes her style as ‘naturally sexy, naturally confident and modern.’ (STYLE & THINKING) • Has a distinctive look – a mixture of feminine romanticism and urbane functional modernity. (STYLE) • Uses flowing fabrics in pastel shades with lace matched with tailoring. (STYLE) • Signature style fuses tailored garments with feminine pieces inspired by lingerie. (STYLE) • She has strong anti-fur beliefs; campaigns for animals; strict vegan diet. No leather or fur in her collections. (THINKING) • Uses wind power in her shops and provides recycled shopping bags.(THINKING) • She combines high end fashion with a green conscience – better than any other designer. (THINKING & STYLE) • Her style combines effortless appeal with a sporty edge.(STYLE) • Working in Saville Row has had a lasting impact on her work – tailoring. (STYLE) • It is important to SM that women feel comfortable in her clothes – easy to wear feeling.(THINKING) • Takes inspiration from current trends picking up on what is going on in the world.(THINKING) • Fashion history informs her work. (THINKING) 	OR 4	8	10	
					10	35

Question		SECTION A		On paper	Question Totals	Overall TOTAL
4	(a)	<p>No answer or an incorrect answer.</p> <p>Award up to three marks for any of the following:</p> <ul style="list-style-type: none"> • Age group. • Sex. • Ethnicity. • Family Type. • Career or education level or retired. • Personal interests/hobbies. • Financial situation. • Fashion style/favoured trends. <p>Accept size if qualified with a reason. Accept other reasonable characteristics.</p>	0 1 1 1	3		
	(b)	(i) <p>No answer or an incorrect answer.</p> <p>Award up to two marks for answers based on:</p> <p>Primary research is information that is gathered oneself such as a questionnaire / survey / set up a forum that you analyse the data, draw conclusions yourself.</p> <p>Secondary research is information that has been presented by someone else such as an article in a magazine / books / websites / that you can take ideas from.</p> <p>A one mark answer: Primary research is finding things out for yourself.</p> <p>A developed answer for two marks: Primary research is like a questionnaire that you conducted yourself whereas in secondary research you use someone else's research.</p>	0 1 2	2		
		(ii) <p>No answer or an incorrect answer.</p> <p>Award up to two marks for answers based on:</p> <ul style="list-style-type: none"> • To find out how products are made. • To develop templates from other products. • To see what materials work well. • To see what process is used, and why. • To see how products could be improved. <p>A one mark answer: To see how a product has been made.</p> <p>A developed answer for two marks: To see how a product has been made so that you can improve on it when you make yours.</p>	0 1 2	2	7	
	(c)	(i) <p>No answer or does not address the main points – 0 mark</p> <p>Award one mark for each of the following:</p> <ul style="list-style-type: none"> • A soft furnishing item. • Suitable for a child. • Suitable for use in a bedroom. 	0 1 1 1	3		

Question		SECTION A		On paper	Question Totals	Overall TOTAL
	(v)	<p>No answer or the material is unsuitable - 0 mark.</p> <p>Award one mark for a suitable material for soft furnishings which could include for example:</p> <ul style="list-style-type: none"> • Cotton and named cotton types. • Polyester cotton. • Acrylic fleece. • Fake fur. • Velour. • Velvet. • Crushed Velvet. • Corduroy. • Needle Cord. <p>NOTE: product is aimed at children therefore material HAS to be suitable for this purpose.</p>	0 1 1	 2		
	(vi)	<p>No answer or the answer cannot be understood, no annotation.</p> <p>Poor quality graphic skills, hard to understand, annotation unclear.</p> <p>Graphic skills are adequate, understandable, limited annotation of important style details.</p> <p>Good graphic details and image, appropriate styling, understandable, good annotation of important style details.</p> <p>Excellent graphic details and image, highly appropriate styling, with correct annotation of important style details and techniques.</p>	0 1 2 3 4	 4		18
					25	60

Question		SECTION B		On paper	Question Totals	Overall TOTAL
5	(a)	<p>No answer or an incorrect answer – 0 mark.</p> <p>Acceptable answers in this order: TRUE FALSE TRUE</p>	0 1 1 1	3	3	
	(b)	<p>(i) No answer or an incorrect answer – 0 mark.</p> <p>Award one mark based on any of the following:</p> <ul style="list-style-type: none"> • Costs are kept down as no running costs for a warehouse. • Less space needed - with a faster turnaround of stock, you do not need as much warehouse / storage space to store goods. • Reduces the amount of storage a manufacturer needs to rent or buy, frees up funds for other parts of the business • A faster turnaround of stock prevents goods becoming damaged or obsolete while sitting in storage, reducing waste. • JIT inventory management is ideal for smaller companies that don't have the funds available to purchase huge amounts of stock at once. <p>Answers must FULLY describe the advantage.</p>	0 1	1		
		<p>(ii) No answer or an incorrect answer – 0 mark.</p> <p>Award one mark based on any of the following:</p> <ul style="list-style-type: none"> • A delay in delivery of stock can hold up production/costs money. • Need to have a good relationship with suppliers - dependent on other people to deliver on time. • Quality defects can be detected too late so could hold up production – cost implication. • A delay in production could impact on your business – not being able to deliver to your customer could impact on further business. • More planning is needed to ensure stock is delivered on time. <p>Answers must FULLY describe the disadvantage.</p>	0 1	1	2	
	(c)	<p>No answer or an incorrect answer – 0 mark</p> <p>Only acceptable answers: MANUFACTURING, TECHNICAL DIMENSIONS, SIZES, TOLERANCES</p>	0 1 1	2		

Question		SECTION B		On paper	Question Totals	Overall TOTAL
	(d)	<p>No answer or an incorrect answer - 0 mark.</p> <p>Award up to three marks for answers that clearly demonstrate an understanding of the factors that affect the different scales on manufacturing:</p> <p>One-off products: only one made; personal to one customer; exclusive, made to measure/bespoke – highly skilled craftspeople needed to manufacture, expensive, detailed. Would not be feasible to make on a production line because of the level of intricate detail or skill needed.</p> <p>Batch production: seasonal products so limited demand; trialling a new product, limited numbers needed simply to test market; high quality products on a semi-exclusive line – designer ranges; fad fashions often in and out of fashion fairly quickly, no demand for large quantities.</p> <p>Mass production: huge demand for products; classic products that rarely change over extended periods of time; huge quantities dictate scale of manufacture; style of products suits mass production.</p> <p>Award one mark for each clear factor stated for example: A manufacturer would use batch production if it was a seasonal product where only a limited amount was needed.</p>	0			
			1 1 1	3	3	
					10	70

Question			SECTION B		On paper	Question Totals	Overall TOTAL
6	(a)	(i)	No answer or an incorrect answer - 0 mark. Only acceptable answers in this order: TRUE FALSE FALSE TRUE	0 1 1 1 1	4		
		(ii)	No answer or an incorrect answer - 0 mark. Award one mark for a correct reason based on: <ul style="list-style-type: none"> • Can add strength to the material. • Can change how the material drapes. • Can change the appearance and look of a material – jacquard, satin weave – adds a sheen or makes it glossy. • To create textured materials. • To create pattern within the weave. Accept other factually correct reasons.	0 1	1	5	
	(b)	(i)	No answer or answers are incorrect – 0 mark. Award up to two marks based on: (Mechanics of knitting) Warp threads go along the length of the material while weft threads go across; in warp knitting, machine knit in a vertical fashion with loops in the knitting interlinking side by side vertically. In weft knitting yarns loop horizontally across the material. OR (Functional differences) Warp knitting is considered more stable and will not unravel if cut; it can be cut into pieces which can be sewn together to make a product; less stretchy. Weft knitting often done by hand; stretches easily; unravels if cut; has to be knitted into shaped pieces to make a product. A one mark answer: Weft goes across, warp up the length. A developed two mark answer: Yarns loop together across the weft of the knitting whereas yarns loop vertically on warp knitting. For full marks there must be a direct comparison between the two types of knitting.	0 1 1	2		
		(ii)	No answer or answers are incorrect – 0 mark. Award up to two marks for explanations based on: The loops that are created in knitting (interlinking yarns) create spaces in between the yarns. Warm body air cannot escape through these spaces, air is trapped within these spaces keeping the wearer warmer. Different types of knitting can be even warmer if more air is trapped. A one mark answer: Warm air gets trapped in the spaces. A more developed response for two marks: The loops in the yarn in knitting create spaces which trap warm air from the body; this keeps the warmth in. Reference to 'scales' on yarn does apply as the question does not state the type of yarn.	1 2	2	4	

Question		SECTION B		On paper	Question Totals	Overall TOTAL
	(c)	<p>No answer or an incorrect answer - 0 mark</p> <p>CALENDARING Award up to three marks based on: A technique designed to smooth the surface of the material. Material is passed through heated rollers which compacts and smooths the surface of the material; it improves the lustre of the material; it's a durable finish.</p> <p>A one mark answer: It smooths the surface of the material.</p> <p>A two mark answer more developed: The material is passed between two rollers to smooth the surface.</p> <p>A three mark answer fully developed: The material is passed between two rollers which smooths and compacts the surface making it more lustrous and durable.</p> <p>EMBOSSING Award up to three marks based on: material is passed through heavy rollers which have a pattern on them; the pattern is then in-printed creating a relief pattern on the material; different patterns can be in-printed improving the aesthetic of the material by way of the texture and appearance.</p> <p>A one mark answer: a pattern is in-printed into the material.</p> <p>A two mark answer more developed: The material is passed through rollers which in-prints a relief pattern into the material.</p> <p>A three mark answer fully developed: The appearance of the material is improved by passing the material through engraved rollers which create a relief pattern on the material.</p> <p>NOTE: This is not about printing onto material – candidate needs to indicate it's a relief pattern.</p>	0 1 2 3 Or 1 2 3	3	3	
	(d)	<p>No answer or an answer that is incorrect – 0 mark.</p> <p>Award up to three marks for explanations based on: The cavity which is in the centre of the raw cotton fibre is hollow; when water penetrates through the material, moisture is stored in these cavities, giving cotton its absorbent property. As cotton absorbs moisture (from perspiration) it also keeps the wearer cool as moisture is absorbed. As a result cotton appears to be 'breathable' however moisture is only absorbed and not wicked away as is the case of a truly 'breathable' material. Technically cotton is absorbent not breathable.</p> <p>A one mark answer: As cotton absorbs moisture it appears to breath.</p> <p>A two mark answer: As cotton absorbs moisture from perspiration it keeps you cool. This feels like the cotton is breathable.</p> <p>A fully developed answer for three marks: Cotton <u>only appears</u> to be breathable because it absorbs moisture from perspiration which in turn keeps you cool.</p> <p>NOTE: Some understanding of cottons <u>absorbent</u> quality is needed in the answer.</p>	0 1 2 3	3	3	
					15	85

Question			SECTION B		On paper	Question Totals	Overall TOTAL
7	(a)	(i)	No answer or an incorrect answer – 0 marks. Only acceptable answer in this order: V NECK COWL NECKLINE(Accept draped neckline) SWEETHEART NECKLINE	0 1 1 1	 3		
		(ii)	No answer or an incorrect answer - 0 mark. Award one mark for answers based on either of the following: <ul style="list-style-type: none"> From middle sleeve seam, over fullest part of bust area, through waistline to the hem. OR <ul style="list-style-type: none"> From middle of shoulder, over fullest part of bust area, through waistline to the hem. 	0 1	 1		
		(iii)	No answer or an incorrect answer - 0 mark. Award up to two marks based on: the purpose of a dart is to take away the fullness in material; pinch out what is usually a triangular shape; this gives some shape to areas where the material needs to fit closer to the body. A one mark answer: a triangular piece of material pinched out to give shape. A two mark developed answer: A dart is a triangular piece of material pinched out of the material which will provide some shape to the garment.	0 1 2	 2		
		(iv)	No answer or an incorrect answer - 0 mark. Award up to two marks for the explanation based on: An open ended zip is one that completely opens right though into two separate pieces; allows for clothes to be put on or taken off; zip is brought back together to fasten. Award one mark for the <u>named suitable textile product</u> for example: Coats, jackets, cardigans; zip linked mattresses; on other products that occasionally need to be joined but not permanently. A one mark answer: A zip that opens completely OR used on a coat that opens. A two mark answer: A zip that fully opens up for example on a coat. A three mark response with detail: An open-ended zip fully opens up into two pieces but can be relinked to fasten such as those used on a coat.	0 1 2 3	 3		9

Question		SECTION B		On paper	Question Totals	Overall TOTAL
(b)	(i)	No answer or an incorrect answer - 0 marks.	0			
		FRENCH SEAM Award up to three marks for answers based on: usually used on very fine or sheer materials where the seams may be (partially) visible; can only be used on straight seams; all raw edges are concealed – important if the seam is visible; quite often used on more expensive products – such as dresses, blouses. (CLOTHING)	1			
		A one mark basic answer: It's used to hide a raw edge on a seam. A more developed answer for two marks: It's used on sheer materials where seams can be seen. The raw edge is covered.	2			
		A fully developed response for three marks: It is used on very sheer materials where the seam may be visible. It conceals all the raw edges and is a neat finish. Exemplification may refer to a product or type of material.	3	3		
(c)	(ii)	No answer or an incorrect answer - 0 mark.	0			
		LAPPED SEAM Award up to three marks for answers based on: Lapped seams usually used for strength; comfortable next to the skin as seam allowance lies flat; a lapped seam is seen as the second row of stitching is seen on the outside; this feature can be used to add detail – top stitched as on jeans for example. Can be used on children's clothes or workwear where strength is needed.	1			
		A one mark basic answer: A strong seam used on jeans. A more developed answer for two marks: It is a strong seam often used on jeans with a row of top stitching.	2			
		A fully developed response for three marks: As it has two rows of stitching it is a very strong seam. It is usually visible on the leg of a pair of jeans.	3	3	6	
(c)	(i)	No answer or a method that would not work - 0 mark.	0			
		Award one mark for a method that is clearly stitched in place based on for example: appliqué; free machine embroidery; machine embroidery; computerised embroidery; stitched lace/braids/ trims; pleats/frills/tucks; pin tucks.	1	1		
(c)	(ii)	No answer or a method that would not work or is incorrect - 0 mark. Award up to four marks for a method that would work:	0			
		A one mark answer: basic sketch with notes; method would probably work in part for the named process.	1			
		A two mark answer: satisfactory sketch /notes; method would work for the named method but lacks detail.	2			
		A three mark answer: a satisfactory sketch/notes; method would work for named process, some detail.	3			
		A four mark answer: an excellent sketch/notes; method highly suitable for named process fully explained. Answers will vary dependent on the sketched idea. Assess the quality of work as a whole and apply marks for notes and sketches on a 'best fit' approach.	4	4	5	
					20	105

Question		SECTION B		On paper	Question Totals	Overall TOTAL
8	(a)	<p>No answer or an incorrect answer – 0 mark.</p> <p>Only TRUE and acceptable answers:</p> <ul style="list-style-type: none"> • CIM stands for Computer Integrated Manufacture. • Fabric designs can be developed on screen and digitally printed directly onto materials. • Machinery can be controlled by computers and is more efficient. 	0 1 1 1	3	3	
	(b)	<p>No answer or an incorrect answer – 0 mark.</p> <p>Award up to four marks for answered based on :</p> <ul style="list-style-type: none"> • Design/picture could be imported into suitable software package and vectorised into outline design or outline design developed on the computer using suitable software. • The size and shape could be manipulated to achieve what the design wants. • Design could be transferred to the laser cutter. • Set laser to suit the type of material – card / acetate – then cut out <p>Look for four separate logical stages to gain full marks. Other methods may be acceptable.</p>	1 Or 2 Or 3 Or 4	4	4	
	(c)	(i) <p>No answer or an incorrect answer – 0 mark.</p> <p>Award up to three marks for answers based on: questionnaires or surveys can be conducted easily online – get viewpoints from potential customers about the design; information could be entered onto a spreadsheet and various types of charts created to compare results – strengths weaknesses; visual way of presenting information, evaluation of ideas is more straightforward.</p> <p>A one mark answer: Conduct a survey online about the idea.</p> <p>A two mark answer some detail: Use a spreadsheet and input the result of a survey conducted online. Visually results are easier to see.</p> <p>A three mark answer with detail: Having conducted a survey about the idea online, enter the data on a spreadsheet to show the results in a bar or pie chart. This will make it easier for the candidate to evaluate the strengths and weaknesses in a design.</p>	0 1 2 3	3		

Question		SECTION A		On paper	Question Totals	Overall TOTAL
	(ii)	<p>No answer or an incorrect answer – 0 mark.</p> <p>Award up to five marks for answers based on:</p> <ul style="list-style-type: none"> • The process of creating a range of ideas and developing them is a more efficient method of designing rather than traditionally doing so by hand. • Designs created on the computer can be manipulated more easily than by hand – development more effective. • Changes can be done quite easily if a design needs refining rather than redraw everything. • Designs can be presented in a range of colourways offering choice which is a time consuming process if drawn by hand. • Virtual prototypes, visualising products in 3D can be done so you can see what the finished product could look like before making it. • 3 dimensional designs can be produced on screen to be 3D printed – components and products can be tested/evaluated. Not possible without computer design. <p>Award one mark for each relevant point or qualified point up to five marks.</p> <p>Evaluate requires a statement and elaboration of the statement. There needs to be commentary on what can be done with computer design compared to other methods.</p> <p>Do not credit unqualified assertions, e.g. quicker, easier etc.</p>	0			
			1 1 1 1 1	5	8	
					15	120