GCE AS MARKING SCHEME

SUMMER 2025

AS
DESIGN AND TECHNOLOGY - COMPONENT 1
FASHION AND TEXTILES
B601U10-1

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About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

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EDUQAS GCE AS DESIGN AND TECHNOLOGY - COMPONENT 1

FASHION AND TEXTILES

SUMMER 2025 MARK SCHEME

Marking guidance for examiners

Summary of assessment objectives for Component 1

The questions on this exam paper assess aspects of AO3 and all of AO4.

Within AO3, this exam paper assesses:

Analyse and evaluate –
- *wider issues in design and technology*

Within AO4, this exam paper assesses:

Demonstrate and apply knowledge and understanding of –

- *technical principles*
- *design and making principles*

In the mark grids, the marks allocated to assessment objectives are shown with respect to specific elements:

AO3 2a analyse wider issues in design and technology
AO3 2b evaluate wider issues in design and technology

AO4 1a demonstrate knowledge of technical principles
AO4 1b demonstrate understanding of technical principles
AO4 1c apply knowledge and understanding of technical principles

AO4 2a demonstrate knowledge of designing and making principles
AO4 2b demonstrate understanding of designing and making principles
AO4 2c apply knowledge and understanding of designing and making principles

The structure of the mark scheme

In low-tariff questions, the mark scheme includes indicative content which should be used to assess the quality of the candidate's response. The content is not prescriptive, and candidates are not expected to mention all material referred to. Examiners should seek to credit any further relevant evidence offered by the candidates.

In high-tariff questions, the mark scheme has two parts:

- An assessment grid showing bands and associated marks that should be allocated to responses which demonstrate the characteristics required by the appropriate assessment objectives relevant to the question

- Indicative content which should be used to assess the quality of the specific response. The content is not prescriptive, and candidates are not expected to mention all material referred to. Examiners should seek to credit any further relevant evidence offered by the candidates.

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Applying the mark scheme

Stage 1 - Deciding on the band

Beginning at the lowest band, examiners should look at the candidate's response and check whether it matches the descriptor for that band. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer. Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 - Deciding on the mark

During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a candidate's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a candidate need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

Where questions target multiple assessment objectives, an answer may deserve to be awarded marks from different bands for different assessment objectives. Where questions target more than one element within an assessment objective, and those elements are conflated and not considered separately within the mark scheme, examiners must not attempt to apportion marks within that assessment objective by element.

In summary:

- the first stage for an examiner is to use both the indicative content and the assessment grid to decide the overall band;
- the second stage is to decide how firmly the characteristics expected for that band are displayed;
- thirdly, a mark for the question is awarded.

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Question 1

The dress pictured below is made from a weft knitted fabric.

(a) Compare **two** characteristic differences between a warp knitted fabric and a weft knitted fabric. 2 x [2]

(b) Describe the benefits of weft knitted fabrics that make them a popular choice with fashion designers. [4]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)	✓						4				4

Candidates should demonstrate understanding and are to be awarded up to 4 marks
Each compared characteristic to be awarded 2 marks. Two required for full marks.

No response or an inappropriate response – 0 marks

Responses may include:

- Warp yarns loop vertically [1], weft yarns loop horizontally to form a row. [1]
- Warp knits have limited stretch [1] in comparison to weft knits which have high elasticity and stretch. [1]
- Warp knits look the same on both sides of the fabric [1], weft knits look different on the right and wrong side of the fabric. [1]
- Warp knits do not unravel when cut [1], weft knits can unravel when cut. [1]
- Warp knits do not ladder [1], weft knits can ladder easily (when fine). [1]
- Warp knits shrink less, than weft knits [1]. In warp knitting each needle uses its own loop of yarn to form rows, less elastic, less likely to shrink. [1], or, Rib weft knit fabrics are highly elastic and are therefore more prone to shrinkage. [1]
- Warp knits lie flat [1], weft knits tend to curl at the edges. [1]
- Accept responses that reference differences in manufacturing:
- At least one yarn is required for each knitting needle of a warp knit [1], weft knits can be made from any number of needles from just one yarn. [1]
- Warp knits need numerous yarns to be manufactured [1], weft knits can be manufactured using just one single yarn. [1]
- Warp knits can only be produced on an industrial machine [1], weft knits can be manufactured by hand. [1]

Credit other appropriate responses.

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(b)	✓					2		2			4

Candidates should demonstrate knowledge and understanding and are to be awarded up to 4 marks. Each benefit described with clarity to be awarded up to 2 marks.

No response or an inappropriate response – 0 marks

Responses may include:

- Weft knits don't crease (no matter what their fibre content) [1] ensuring they are easy to care for and always look good on wearing. [1]
- Weft knits stretch/are elastic to fit any body shape [1] and recover shape [1] when not being worn, ensuring a long life. [1]
- Weft knits are soft and comfortable to wear [1] allowing the skin to breathe due to open loop formation. [1]
- Weft knit fabric is cheap and fast to manufacture (as opposed to woven fabric) [1] requiring few processes and making use of high production speeds. [1]
- Weft knits are light in weight [1] and can be made into very fine fabrics [1] making them versatile fabrics for all seasons. [1]
- Weft knits are good insulators [1] trapping air to keep the body warm even if fine in construction. [1]
- Weft knits can be bulked up using the finishing process brushing [1] increasing insulation/comfort properties. [1]

Credit any other appropriate descriptive response.

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Question 2

The bean bag seat pictured below has been designed with a removable covering. The removable covering is made from a plain weave fabric and is 100% polyester.

(a) Explain **two** advantages to the consumer of being able to remove the seat covering. [4]

(b) Describe the reasons the designer has selected a plain weave fabric made from 100% polyester for the removable covering. [4]

(c) The bean bag seat covering is formed from 6 petal shaped patterns. Each pattern is cut from a rectangle measuring 40cm x 122cm.
Calculate the **minimum** length of fabric required to cut the 6 rectangles when the fabric width measures 150cm. Show all calculations.
Note: seam allowance has been included in the measurements provided. [5]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)							2		2		4

Candidates should demonstrate knowledge and understanding and are to be awarded up to 4 marks. A maximum of 2 marks should be awarded if no clear explanation is provided with each advantage.

No response or an inappropriate response – 0 marks

Responses may include:

- Seat coverings are at high risk of getting dirty from food/pet hair/ink. [1] Being able to remove the covering allows for washing/cleaning and therefore extends the life of the product. [1]
- Being able to remove the seat coverings brings design flexibility as alternative covers of different colours/textures can be used [1] to match any changes in room decoration. [1]
- Being able to remove the covering allows access to the filling (usually polystyrene balls). [1] The filling can be replaced/added to easily when flattened with wear, [1] extending the life of the product. [1]
- Removable coverings protect the fillings from ingrained dirt. [1]

Credit other appropriate responses.

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(b)	✓					1	3				4

Candidates should demonstrate knowledge and understanding and are to be awarded up to 4 marks. Reference does not need to be made to both plain weave AND polyester to be awarded full marks.

No response or an inappropriate response – 0 marks

Responses may include:

Plain weave:
- Are stable enabling shape to be maintained. [1]
- Simplest woven construction and therefore the cheapest. [1]
- Plain surface that makes a good background for printing. [1]
- Balanced weave/consistent surface pattern. [1]
- Retains shapes despite regular washing. [1]
- Resists pilling, ensuring quality appearance even with wear. [1]
- Less porous due to tight weave (more warp crossover points). [1]

Polyester:
- Has good tensile strength / long-lasting / withstand wear and tear. [1]
- Has good durability / will not wear or tear easily. [1]
- Is easy to care for / wash effectively at low temperatures. [1]
- Highly crease resistant / good elasticity / retains shape when in fabric form. [1]
- Has water resistant properties (more difficult to stain). [1]
- Has an attractive sheen/lustre. [1]

Credit any other appropriate response.

(c)		5					1	4			5

Candidates should demonstrate knowledge and understanding and are to be awarded up to 5 marks.

To be able to calculate the minimum length of fabric required, **both** calculations shown below should be used to confirm correct answer. If only calculation 2 is used, without calculation 1, a maximum of three marks can be awarded.

Calculation 1:
150cm/40cm = 3.75. 3 patterns will fit along the width of the fabric **1 mark**
OR 3 x 40cm = 120cm. 3 patterns will fit along the width of the fabric.
6 patterns are required
2 x 122cm = 244cm or 2.44m **1 mark**

Calculation 2:
150cm/122cm = 1.23. I pattern will fit along the width of the fabric. **1 mark**
6 x 40cm = 240cm or 2.4m **1 mark**
2.4 metres (or 240cm) is the minimum length of fabric required. **1 mark**

Accept other methods of calculation.

All calculations need to be shown for full marks.

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Question 3

A lined and quilted puffer jacket is shown below.

(a) Designers often analyse competitors' products to learn about 'above the line' and 'below the line' features.
Explain what a designer could learn from studying the below the line features of the puffer jacket. [4]

(b) Using notes and sketches explain how you could test the insulation qualities of the puffer jacket's material. [4]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)									4		4

Candidates should demonstrate knowledge of design and make principles and are to be awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Below the line = invisible, operational/constructional characteristics. How the product functions and performs.

Responses should be based on:

Below the line features:

- Wadding/insulation [1], thickness of wadding to keep wearer warm. [1]
- The type of seams used (plain seams)/stitching (running stitch) [1], where positioned. [1]
- Pockets (welt/zipped) [1], how they have been sewn/finished [1], size of pockets (anthropometric) reference. [1]
- What type of fabric has been used [1] and the properties, for example, is it water resistant/proof/wind proof? [1]
- Fits/functions/doesn't restrict movement [1], how it 'sits' on the body (ergonomic reference). [1]

Credit other appropriate responses.

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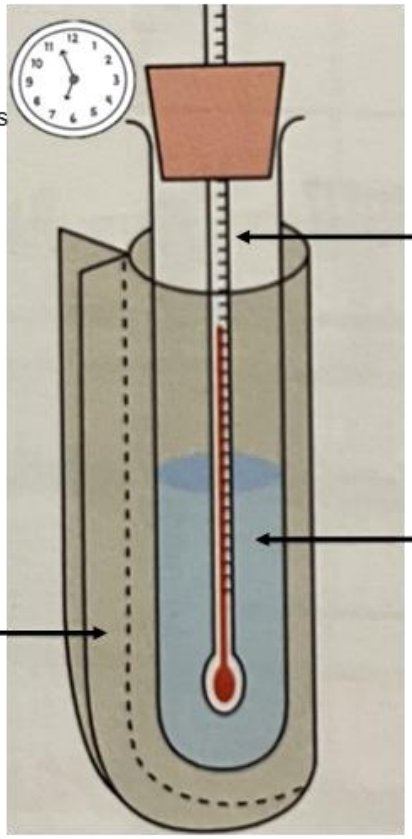
(b)	✓					4						4

Candidates should demonstrate knowledge and are to be awarded up to 4 marks. Both notes and sketches are required to be awarded 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

Insulation Test



Time.

Using a timing device to ensure accurate recordings at regular intervals.

Thermometer.

Record changes in temperature over determined time points, e.g., every 5 minutes. OR Record every temperature drop of 5^0C.

Test Tube filled with water.

Starting temperature of 100^0C makes recording temperature drop, easier.

Fabric.

Fabric needs to be of a set size and one that is large enough to cover the water.

Control

A control is required for comparisons to be made. A replicate test, with no water, should take place, results in temperature drop and time will establish the insultation properties of the tested fabric.

Conclusion:

The longer the fabric keeps the core temperature, the more thermal insulating it is.

Basic sketch with limited notes	**1 mark**
Simple sketch/s with some understanding of an appropriate testing method	**2 marks**
Clear sketch/s with developed understanding	**3 marks**
Clear sketch/s with fully detailed understanding	**4 marks**

Credit other appropriate responses.

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Question 4

The detachable peplum shown in the pictures below is made from one circular pattern. The material is made from 100% wool.

(a) Explain why wool has been used for the peplum material. [4]

(b) (i) Calculate the area of the peplum pattern to the nearest whole number. [5]
(ii) Twelve knife pleats are to be added to the peplum waistline. Each pleat measures 4cm in width. Calculate the circumference needed to accommodate the 12 pleats. [3]

(c) The fabric costs the manufacturer £2.60 per peplum, and all other components and overheads cost £7.20 per peplum. Calculate the cost to manufacture 145,000 peplums. [2]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)						2	2				4

Candidates should demonstrate knowledge and understanding and are to be awarded up to 4 marks.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Wool is breathable [1] and has moisture wicking qualities [1], making it more comfortable to wear (in all weathers). [1]
- Wool fibres have crimp [1] which enables air to be trapped and improves the insulation properties of the fibre. [1]
- Wool has very good elasticity [1], this ensures the fabric will not crease. [1] This extends the length of time the product can be worn. [1]
- Wool is durable/hard wearing [1], it retains it's shape well [1] and therefore withstands everyday wear. [1]
- Wool is odour resistant (and can absorb sweat and odours) [1], so requires less washing, [1]. As wool is difficult to wash as its shrinks easily, this long life between washes aids the wearer. [1]
- Wool is dirt resistant. [1] The scales of the fibre reduce the ability of dirt and dust penetrating the fibre [1]. This keeps the garment cleaner for longer. [1]
- Wool is flexible and does not break easily. [1]
- Wool is anti-static [1] as it absorbs moisture vapour. [1]
- Wool is fire resistant (it does self-extinguish if flame is removed). [1]
- Wool is a natural / renewable material / sustainable. [1]

Credit other appropriate responses.

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(b) (i)		5						5			5

Candidates should demonstrate knowledge and understanding and are to be awarded up to 5 marks.

1. Calculate the area of the inner circle:
   $A = \pi r^2$
   $A = 3.14 \times 10.35^2 cm = 3.14 \times 107.12 cm$ **1 mark**
   $A = 336.54 cm^2$ **1 mark**

2. Calculate the area of the large circle
   $A = \pi r^2$
   $A = 3.14 \times (10.35 cm + 20 cm)^2$ **1 mark**
   $A = 2892.32 cm^2$ **1 mark**

3. Total area:
   $2892.32 cm^2 - 336.54 cm^2 = 2555.78 cm^2$ (or $255.78 m^2$) **1 mark**

   Accept whole number answers **$2556 cm^2$ or $2557 cm^2$**

(b) (ii)		3						3			3

Candidates should demonstrate knowledge and understanding and are to be awarded up to 3 marks.

$C = 2\pi r$
$C = 2(\pi \times 10.35 cm)$ **1 mark**
$C = 2 \times 32.52 = 65.03 cm$ **1 mark**
$C = 65.03 cm + (4 \times 12 cm) =$ **113.03cm** **1 mark**

Accept answers between **112cm and 113.1cm**

Accept other methods of calculation.

All calculations need to be shown for full marks.

(c)		2						2			2

Candidates should demonstrate knowledge and understanding and be awarded up to 2 marks.

Cost to manufacture 145,000 peplums:
£2.60 + £7.20 = £9.80 **1 mark**
£9.80 x 145,000 = **£1421** **1 mark**

Accept other methods of calculation.

All calculations need to be shown for full marks.

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Question 5

The jumpsuit shown below has been made from 100% silk.

(a) Explain the reasons silk has been chosen for the jumpsuit. [6]

(b) French seams have been used to join the side seams of the silk jumpsuit. Discuss the suitability of using French seams as a joining method for the jumpsuit. [4]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
(a)	✓					2	4				6

Candidates should demonstrate knowledge and understanding and be awarded up to 6 marks. Candidates can choose to explain both the properties of the fibre and the characteristics of the fabric.

No response or an inappropriate response – 0 marks

Responses should be based on:

- Silk fabric drapes well [1] and this makes it a flattering fabric to cover the body. [1]
- Silk fabric has a quality lustre/sheen. [1] This makes the fabric look (and feel) expensive/luxurious. [1]
- Silk fabric has a low density/is light weight [1] but has good insulation properties for such a light weight material, [1] making it suitable for all seasons. [1]
- Silk fabric is non allergenic/gentle on skin [1] and is therefore suitable for all wearers. [1]
- Silk fabric is breathable [1], making it comfortable to wear [1] and this keeps the body temperature constant (thermal regulator). [1]
- Silk fabric has some elasticity [1] enough to keep shape/be crease resistant if dried flat. [1]
- Silk fabric is fairly absorbent [1] and this means it has a good ability to absorb dye/print well for bright colours. [1]
- Silk fabric can be hand washed and is fast drying, [1] making it easy to care for. [1]
- Silk has a good tensile strength/long lasting if cared for [1] so can last a long time/sustainable. [1]
- Silk resists mildew, [1], so can be stored without damage. [1]
- Silk is luxurious, has a high price due to time consuming production processing [1] but gives a luxurious feel/handle and aesthetic. [1]

Credit other appropriate responses.

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(b)							4				4

Candidates should demonstrate understanding and be awarded up to 4 marks.

No response or an inappropriate response – 0 marks
A French seam encases raw edges of the seam allowance.

Responses should be based on:
Advantages:

- French seams are very neat providing a clean/professional finish to seams offering a quality finish. [1]. They are time consuming/difficult to manufacture [1], which often means the garment is more expensive to purchase (an advantage for the manufacturer / retailer). [1]
- Silk is a fine fabric which frays easily, French seams prevent fraying. [1]
- Raw edges are completely encased, [1], ensuring a professional, neat finish [2].
- No requirement to neat/overlock/finish seam edges, [1], reducing a finishing process (and saving time in manufacture). [1]
- Suitable for fine fabrics – like silk – as they lie flat [1]and are therefore comfortable next to skin. [1]

Disadvantages:

- French seams are time consuming to manufacture [1] which add to the cost to manufacture the garment (a disadvantage for the consumer having to pay more). [1]
- Difficult to sew due to fineness of silk fabric/difficult to trim and encase raw edges [1] and this may increase the number of faulty garments manufactured. [1]

Credit other appropriate responses.

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Question 6

Toiles and models are commonly used by fashion designers during the iterative design process.

Explain why toiles and models are used as part of an evaluative activity. [5]

	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
									5		5

Candidates should demonstrate an understanding of design and make principles and be awarded up to 5 marks.

Both advantage(s) and disadvantage(s) should be explained in response provided to access full marks. There does not need to be an equal weighting of both advantages and disadvantages to access full marks.

No response or an inappropriate response – 0 marks

Responses should be based on:
Advantages:

- A toile allows the designer to evaluate the fit and function/purpose of a design idea [1] and if it meets the target market requirements/design specification. [1]
- Toiles and models are used to evaluate the quality finish of a product, [1] such as the seam type/possible finish(es)/size etc. [1]
- Changes to fit/function can be drawn directly on a toile [1] and then deconstructed to produce accurate/altered patterns. [1]
- Toiles and models are useful to help develop an idea from a sketch [1] as this helps to understand the feasibility/potential of design. [1]
- Modelling often uses selected fabrics and gives a clear representation of a process/technique [1], allowing a designer to know if their design will work or not. [1]
- Toile and model patterns can be produced using CAD, allowing the evaluative process to be much quicker and more efficient [1] than producing all by hand [1]. 3D forms and how they behave on a human form, can be replicated using design software, [1] this gives a clearer/quicker representation [1], bringing accuracy for manufacture. [1]
- Toiles and models allow the designer to evaluate design ideas against design specification, [1], meeting precisely the needs of the retailer/target market/consumer. [1]
- Can only be testing a single feature [1] allowing for a detailed evaluation on a focused part of a design. [1]

Disadvantages:

- Toiles are made from cheaper fabrics – like calico – which may behave differently to the fabric that is to be selected for the design. [1] For example, seams may lie differently on the body due to the fabrics structure. This means any patterns that result from a toile, will not be suitable for prototyping/manufacture. [1]
- Toiles often don't include fastenings, hems, trims and embellishments. [1] These are often modelled separately and if unsuccessful, wastes time. [1]
- Spending time/money on toiles and models extends the time it takes for a product to get to the consumer. [1] This is not ideal for the fast fashion industry where trends are quickly replaced. [1] Sales may be affected. [1]
- Toiles and models can add to retail cost as additional processes, skilled labour and time is required. [1] Without them, the product may not meet the needs of the consumer, and this can lead to financial consequences for both designer and retailer. [1]

Credit any other appropriate response.

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Question 7

A fashion lifecycle shown below displays the sales of a product over a period of time.

(a) Use the fashion lifecycle shown to analyse the benefits of monitoring the sales of a fashion product during its lifecycle. [6]

(b) Evaluate how image makers and trendsetters impact the choices consumers make when buying fashion clothing. [6]

	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
(a)				4			2				6

Candidates should show evidence of *logical reasoning* or *deconstruct information* and apply this to technical principles to be awarded up to 6 marks.

Responses should be based on:

Data collected from the sales of a product:

- Allows retailers to determine customers' preferences and the trends that are most popular which can optimise future sales.
- Identifies if and what marketing strategies have helped boost sales (or not).
- Identifies if sales increase (or not), due to marketing strategies, such as use of social media, celebrity branding, advertisements.
- Removes the need to second guess consumer preferences, sales can show what is selling and how fast.
- Can withdraw garments or offer sale prices to remove stock that is slow to sell.
- Fast sales of a garment can be seen allowing an additional batch to be produced to maximise sales of popular garments.
- Can compare previous seasons sales/year on year sales identifying patterns.
- EPOS data helps to determine when and where consumers have bought garments (and returned them). This helps with target market differences across the country. What is bought in the north may not be bought in the south. For example, may be determined by weather.
- Employing statisticians or companies to analyse sales data is costly but companies can reap financial benefits if data is acknowledged and acted upon.

Credit should be given to candidates who also reference the stages of the lifecycle in terms of sales. An analysis response is required to meet Band 2 assessment objectives.

Credit any other appropriate response.

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Band	Marks	AO3 2a	Marks	AO4 1c
2	**3-4**	Good analysis of the benefit of monitoring sales of a fashion product during its lifecycle. A sound discussion, which deconstructs information and provides adequate connections and reasoning. Generally well-considered and relevant factors used as a context for the discussion	**2**	Applies a sound knowledge and understanding of technical principles in the context of fashion lifecycles.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	**1-2**	Limited analysis of the benefit of monitoring sales of a fashion product during its lifecycle. Little evidence of deconstructing information and limited connections are made. Few factors are identified.	**1**	Applies a basic knowledge and understanding of technical principles in the context of fashion lifecycles.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

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	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
(b)					4					2	6

Candidates should show clear evidence of appraisal and/or make judgements and apply this to designing and making principles to be awarded up to 6 marks.

Responses should be based on:

- Image makers create clothing 'looks' for individual clients, celebrities, magazines and well-known social media personalities. They themselves do not impact our clothing choices, but the people they dress do.
- Image makers focus on a 'look' not just one clothing item. They will suggest hair styles, accessories, make-up looks as well as clothing outfits for their clients. They often design shop window displays.
- Image makers put a 'look' together knowing it will be seen by many who will copy the look. They often get paid to use certain branded products, which boost the sales of that brand.
- Image makers can increase the profile of celebrities and the number of followers they have who adopt their 'looks'.
- Trendsetters do not copy others; they reinvent new looks and styles. They do not intentionally start new trends, but their following often copies what they wear.
- Trendsetters can be anyone who has an individual style that is copied, from a student at school to a politician or an actor.
- Well known trendsetters may have a contract with a clothing brand to use some of their products, but they will wear in an unconventional way, sparking a new trend.
- Trendsetters have a good sense to what the next style detail will be.
- Trendsetters will use social media and appear in magazines and at events where photographers will be present.
- Consumers will follow and adopt what trendsetters wear, searching out the clothes they wear online.
- Trendsetters change their looks regularly. As soon as a 'look' is copied by followers, it then becomes high fashion. To maintain originality, trendsetters need another 'look'.
- The cost to a consumer is great, buying clothes at peak prices to follow a trend is expensive. It can lead to debt.
- Copying both image makers and trendsetter's ideas increases wasted fashion and sustainability issues. They can both promote sustainable fashion but in reality, this is rarely adopted by a consumer intent of following a fashion trend.
- Trendsetters can have a positive impact on political and social factors that relate to gender, feminism, cultural diversity etc.
- Consumers interest in social media grows as a consequence, it this healthy?

Credit any other appropriate response.

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Band	Marks	AO3 2b	Marks	AO4 2c
2	**3-4**	Good evaluation of how image makers and trendsetters impact choices consumers make when buying fashion clothing. A sound discussion which appraises and/or makes judgements. Generally well-considered, relevant issues used as a context for the discussion.	**2**	Applies a sound knowledge and understanding of design and make principles in the context of image makers and trendsetters. Generally well-considered, relevant issues identified.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	**1-2**	Limited evaluation of how image makers and trendsetters impact choices consumers make when buying fashion clothing. Little evidence of appraising or making judgements.	**1**	Applies a basic knowledge and understanding of design and make principles in the context of image makers and trendsetters.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

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Question 8

Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) have enabled fast fashion brands to introduce and sell new clothing collections every week of the year.

Analyse how CAD and CAM have revolutionised the speed at which clothes can be manufactured. [9]

	Science	Maths		AO3		AO4					Total
				2a	2b	1b	1c	2a	2b	2c	
				6						3	9

Candidates should provide evidence of either deconstructing information, find connection and/or logical chains of reasoning and **apply** it appropriately to designing and making principles to be awarded 9 marks.

Candidates need to show an understanding of how CAD and CAM have revolutionised the speed at which clothes can be manufactured.

Responses could be based on:

CAD Examples:
- Digitising Pattern Design
- Pattern Grading
- Lay Planning
- Pattern Markers

CAM Examples:
- Fabric cutting – laser/CNC
- Some robotic, automatize sewing processes
- Robots to transport garment parts around factory plant
- Automation - labelling and packaging

Candidates may refer to communication methods, e.g., sending designs remotely to manufacturers. Reference can be made to testing/quality control/administration methods that all use CAD/CAM to increase clothing manufacture speed. Dyeing and printing methods all use automotive CAM machines and may be referenced in responses. JIT, Lean Manufacture and FMS may be mentioned and can be credited if context relates to speed of manufacture.

Analysis could include:
- Use of database allows previous designs/patterns to be manipulated/changed without starting from scratch.
- Designs are instantly accessible.
- Changes in shape, colour, print occur quickly and without the need for drawing resources or time spent on pattern development.
- All changes are accurate and irradicate human error, delaying production times.
- Sending electronic designs across the world, instantly, speeds up interaction between client, designer and manufacturer.
- Feedback on designs/amendments can be done electronically.
- Patterns can be graded/sized instantly.

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- Lay planning software means patterns can be positioned (economically) without the need for human intervention.
- Laser cutting and CNC machines means more garments can be cut in a shorter amount of time and with little human intervention.
- Although sewing practices still require human practices, some are now able to be done using CAM machinery and irradicate human error.
- Garments can be labelled and packaged using automation machinery.

However:
- Any CAD/CAM system, to set-up, maintain, and up-grade as new technologies arrive, is extremely expensive and must be maintained for healthy competition.
- All companies that are involved in the manufacture of garments must all use the same/compatible software.
- Expertise/skilled labour needed. Training is necessary to use CAD/CAM effectively and to use to its full potential.

Credit any other appropriate response.

Band	Marks	AO3 2a	Marks	AO4 2c
3	**5-6**	Excellent analysis of CAD and CAM. A thorough discussion, which deconstructs information and demonstrates logical connections and reasoning throughout. Well-considered, relevant examples used to support the discussion.	**3**	Applies a thorough knowledge and understanding of designing and making principles to illustrate, with well-considered, relevant examples, of CAD and CAM.
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	**3-4**	Good analysis of CAD and CAM. A generally sound discussion, which deconstructs information and provides adequate connections and reasoning throughout. Generally well-considered, relevant examples used to support the discussion.	**2**	Applies a generally sound knowledge and understanding of the technical principles to illustrate, with relevant examples, of CAD and CAM.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	**1-2**	Limited analysis of CAD and CAM. Little evidence of deconstructing information and limited connections are made. Few examples used to support the discussion.	**1**	Applies a basic knowledge and understanding of designing and making principles to partly demonstrate, with limited exemplification, of CAD and CAM.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark		

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Question 9

It is estimated that 48% of ready to wear clothing will be bought by consumers from online retailers by the year 2027.

Evaluate the moral and social impact of choosing to buy ready to wear clothing online rather than from the high street. [9]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2a	2b	
					6			3			9

Candidates should show knowledge and understanding of wider issues, with clear evidence of appraisal and/or making judgements and **apply** this to technical principles to be awarded up to 9 marks.

Responses could include:
SOCIAL:

- Online shopping offers a larger range/styles of garments to choose from. High street shops are limited to the stock they can display.
- Online shopping offers a larger range of dress sizes to those available in a high street shop.
- Purchasing/choosing garments online is convenient and can take place on any day or at any time. Consumers are not limited to high street shop opening hours.
- Online orders can take place using any device.
- There is no need for transport as online shopping is delivered direct to the doorstep.
- Postage is often free, and returns can be collected from the home.
- Prices online are often competitive, and sales are regular and easy to access. Emails alert customers to offers/sales and discount codes.
- Consumers have access to clothing sold worldwide – more options.
- Some people prefer to avoid being in public spaces (since the pandemic) and feel 'safer' buying clothes online.
- Consumers can search for a specific product to find the most competitive price.
- Company overheads are less as there are no shops to maintain/rent. Online shops can pass on the savings to their customers, ensuring competitiveness.
- Additional expense for consumer for returning items but returning to stores is cost free – not always a consideration for consumer – may cost more in the long run-in transport costs/time.

MORAL:

- Access to cheaper clothing through second had online stores/apps has helped raise awareness of sustainability issues associated with the textile industry.
- Footfall in shops may be lower but more delivery vans on the road – is this sustainable/added carbon footprint?
- Some online retailers use plastic packaging, and this is not environmentally friendly/morally sound.
- The increase in online clothing stores has increased clothes imported from other countries offering a much larger choice and at a lower price. However, this increases air pollution through an increase in airmiles, transporting garments to the consumer.

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- To ensure workers are treated well and paid fairly, many clothing companies and consumers are choosing to buy Fairtrade garments and those made from organic cotton.

However:
- Some garments need to be returned via a post-office or a drop-off agent and this can be inconvenient for the customer.
- Smaller retailers cannot compete with large online stores and have had to permanently close.
- High street shops allow consumers to try on, see and feel garments before buying, which online stores cannot offer.
- Shopping on the high street is a social activity and brings people together. Online shopping can be isolating.

Credit any other appropriate response.

Band	Marks	AO3 2b	Marks	AO4 1c
3	**5-6**	Excellent evaluation of why consumers are choosing to buy ready to wear clothing online. A thorough discussion which appraises and/or makes judgements. Well-considered, relevant wider issues used as a context for the discussion.	**3**	Applies a thorough knowledge and understanding of the technical principles of the increase in online clothing shopping. Well-considered, relevant wider issues identified
		There is a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.		
2	**3-4**	Good evaluation of why consumers are choosing to buy ready to wear clothing online. A generally sound discussion which appraises and/or makes judgements. Generally well-considered, relevant issues used as a context for the discussion.	**2**	Applies a generally sound knowledge and understanding of technical principles to illustrate, with generally well-considered examples, of the increase in online clothing shopping.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	**1-2**	Limited evaluation of why consumers are choosing to buy ready to wear clothing online. Little evidence of appraising or making judgements.	**1**	Applies a basic knowledge and understanding of technical principles of online clothing shopping.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark.		

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Question 10

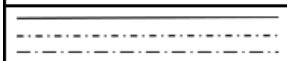
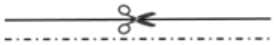
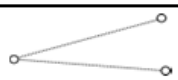
Commercial patterns allow the home sewer to make garments with precision.

Explain how pattern markings, found on commercial patterns, help ensure garments can be sewn to fit and function accurately. You may use drawings to help illustrate your answer. [12]

	Science	Maths		AO3		AO4					Total
				2a	2b	1a	1b	1c	2b	2c	
							8		4		12

Candidates should demonstrate knowledge and understanding **and** apply it to designing and making principles and technical principles to be awarded up to 12 marks based on:

Responses could include:

Pattern Marking	Definition	Relationship Between Fit and Form Accuracy
	Cutting lines in different sizes	Cut along correct dress size line for fit. Use measurements on instruction sheet to determine correct dress size.
	Grain line	Place the grain line parallel to the selvedge edge. Ensures fabric drapes/hangs correctly on the form of the body. Important if fabric has a one directional pattern.
	Seam allowance	To ensure patterns fit together accurately to create form when sewn. It is the distance from the edge of the fabric. Seam allowance is usually 1.5cm but reference needs to be made to pattern instructions to confirm.
	Stitch/seam line	To ensure patterns pieces fit together accurately to create form when sewn.
	Dart	Darts create shape/form to fit the body and are used to create 3D form for bust and waist to hip.
	Lengthen or shorten line	Patterns can be adjusted at this point (shorten or lengthen) to achieve an accurate fit.
	Place on fold line	To achieve a symmetrical shape and accuracy, patterns are placed on the fold of the fabric.
	Balance marks/dots	Identifies where a component or shaping should be placed, such as a pocket. Required for accuracy.
	Notches	Used for accurate pattern matching. It's a quality check to help ensure fit and form are correct. Can be used to ensure patterned/striped fabric matches.
	Position of button hole	Accurate alignment of button holes. Affects fit if not accurately marked prior to sewing.
	Position of button	Accurate placement/sewing of buttons to align with button holes, otherwise fit will not be accurate.
	Pleat placement	Pleats shape and form pattern pieces. The pleat lines need to align to create accuracy and in the correct place on the pattern.
	Bust point	Should match personal bust point to ensure and darts fit the form of the body.

Accept other viable appropriate suggestions.

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Band	Marks	AO4 1b and 1c	Marks	AO4 2b and 2c
3	6-8	Demonstrates and applies a thorough knowledge and understanding of how pattern markings help ensure garments can be sewn to fit and function accurately. Well-considered, relevant wider issues identified.	4	Demonstrates and applies a thorough knowledge and understanding of designing and making, and technical principles in the context of how pattern markings help ensure garments can be sewn to fit and function accurately. drawing upon well-considered, relevant examples.
		There is a sustained line of reasoning which is generally coherent, relevant, substantiated and logically structured.		
2	3-5	Demonstrates and applies a generally sound knowledge and understanding of how pattern markings help ensure garments can be sewn to fit and function accurately. Generally well-considered, relevant issues identified.	2-3	Demonstrates and applies a generally sound knowledge and understanding of designing and making, and technical principles in the context of how pattern markings help ensure garments can be sewn to fit and function accurately. Generally well-considered examples are provided.
		There is a line of reasoning which is generally coherent, mainly relevant and with some evidence and structure.		
1	1-2	Demonstrates and applies a basic knowledge and understanding of how pattern markings help ensure garments can be sewn to fit and function accurately. Few issues are identified.	1	Demonstrates and applies a basic knowledge and understanding of designing and making principles and technical principles in the context of how pattern markings help ensure garments can be sewn to fit and function accurately. Few examples are provided.
		There is limited evidence of relevant examples or structure.		
	0	No response or work that is worthy of a mark		

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