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.

Further copies of this mark scheme are available from aqa.org.uk
Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student’s answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student’s answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student’s answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner’s mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.
## Section A – Technical Principles

<table>
<thead>
<tr>
<th>Qu</th>
<th>Part</th>
<th>Marking Guidance</th>
<th>Total marks</th>
<th>AO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Which <strong>one</strong> of the following is a chemical finish?</td>
<td>1 mark</td>
<td>AO4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correct answer <strong>D</strong> Treating cotton fabric to make it flame retardant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Describe the method for preparing and conducting a workshop test to measure fabric shrinkage.**

   **Explain how you would interpret the results.**

<table>
<thead>
<tr>
<th>Marks</th>
<th>Marking Guidance</th>
<th>AO</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6</td>
<td>Demonstrates excellent understanding of an appropriate workshop test for fabric shrinkage. Describes most steps in testing in detail including preparing the fabric, washing and drying methods, and measuring the fabric. Student is likely to refer to preparing the fabric sample so that the fabric doesn’t fray. At the top end of mark band student will refer to a control or check sample and may refer to the method of calculating percentage shrinkage or change in fabric dimensions.</td>
<td>AO4</td>
</tr>
<tr>
<td>3-4</td>
<td>Demonstrates good understanding of an appropriate workshop test for fabric shrinkage. Most steps in testing are described but there may be a lack of detail in places. There will be some information about measuring the sample or analysing the shrinkage. At the lower end of mark band student may refer to only washing the samples without reference to drying.</td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>Demonstrates basic understanding of an appropriate workshop test for fabric shrinkage by washing and/or drying fabric. Some of the steps will be listed but there will be little or no detail. May only mention the most obvious points concerning washing and/or drying the fabric. Student may not refer to preparing the fabric, measuring or analysing the shrinkage.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>No response worthy of credit.</td>
<td></td>
</tr>
</tbody>
</table>
Indicative content:

- Test fabric samples are prepared by cutting out large pieces of fabric and overlocking the raw edges so that the samples do not fray when washed.
- A template is used to mark precise reference points in permanent ink on each sample of fabric so that data comparisons can be made before and after washing.
- A control or check sample is used to compare against the test sample.
- Each fabric sample is washed in a washing machine along with pieces of other fabrics to replicate a full load of washing.
- Samples are tested using a range of different wash programs and drying conditions. For each sample, the wash temperature, type of agitation, rinse and spin cycles and method of drying is recorded.
- Shrinkage tests are carried out in accordance with the care label instructions testing the fabrics at 10°C higher than the recommended care label wash temperature.
- Methods of drying include drying on a line, tumble drying, flat rack drying and ironing dry.
- After washing and drying the fabric samples the reference points are measured to find out if there is any change in the distance between the marked points.
- The percentage change in size is calculated. If the fabric has shrunk the result is given as a minus figure, if the fabric has stretched this is indicated by a positive figure.

Fabric shrinkage % = \( \frac{(\text{Length after washing} - \text{length before washing}) \times 100}{\text{Length before washing}} \)

Student may refer to width or area instead of length.

Award any other valid responses.
Explain how non-woven fabrics are produced.
In your answer give examples of different non-woven fabrics and reasons for their use in fashion and textile products.

<table>
<thead>
<tr>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-9</td>
<td>Demonstrates excellent understanding of how non-woven fabrics are produced with clear and detailed explanation. May include a wide range of detailed examples of non-woven fabrics used in fashion and / or textile products and gives reasons why non-woven fabrics are used. At the top end of mark band student will refer to different types of non-woven fabric.</td>
</tr>
<tr>
<td>4-6</td>
<td>Demonstrates good understanding of how non-woven fabrics are produced with some detail in their explanation. May include a variety of examples of non-woven fabrics used in fashion and / or textile products with some reasons why non-woven fabrics are used. May refer to only one or two types of non-woven fabric</td>
</tr>
<tr>
<td>1-3</td>
<td>Demonstrates basic understanding of how non-woven fabrics are produced with little or no explanation of process. May include one or more of examples of non-woven fabrics used in fashion and / or textile products but provides little information with little or no reasons why non-woven fabrics are used. May only mention one type of non-woven fabric such as felt.</td>
</tr>
<tr>
<td>0</td>
<td>No response worthy of credit.</td>
</tr>
</tbody>
</table>

**Indicative content:**

- Non-woven fabric is produced directly from fibres that have not been made into a yarn, they are not woven or knitted. The fibres are bonded by mechanical, chemical or heat treatment such as felting wool fibres or bonding fibres using adhesives or pressing thermoplastic fibres together using heat, or fibres can be stitched together. In felt, made from wool fibres, the scales on the fibres are raised and interlocked through use of heat, moisture and pressure; the fibres shrink and are matted together to make the felt fabric.

Examples of non-woven fabrics in textile products and reasons why they are used include: -

- Medical products including surgical gowns, caps, covers, masks and shoe covers, and also wound dressings which can be impregnated with beneficial chemicals. They are single use, disposal products which are discarded after use to ensure safety and hygiene.
- Incontinence pads, wipes, nappies and feminine hygiene products which are disposable and can be impregnated with deodorising
- Inexpensive disposable products eg flame retardant headrest covers on public transport for safety and hygiene.
- Inexpensive interfacings to add structure and stability, fabric stabilizer for embroidery.
- Quilt batting for padding that may be inexpensive and can be hypoallergenic to cause fewer allergic reactions.
- Felt hats which can be moulded into shape, or felt used in textile crafts or ease of cutting and no fraying.
- Carbon fibres made into non-woven fabric for engineering uses that can be customised for specialist applications such as insulation material to dampen sound and mouldable decorative fabric for car interiors.
- Tyvek used in buildings and for overalls as it is inexpensive, strong, tough and durable. Also used in textile craftwork to create surface texture.
- Needle-felt/needle-punched fabric for textile crafts for creative work.
- Decorative Angelina fibre heat pressed to form non-woven fabric.
- Light weight, disposable and inexpensive industrial filters, tea bags and vacuum cleaner bags.
- Stitch bonded fabric for inexpensive home furnishings.
- Geotextile membranes for soil erosion control.
- Reusable, inexpensive lightweight shopping bags to replace plastic bags and packaging material.

Award any other valid responses.

<table>
<thead>
<tr>
<th>Fabric name</th>
<th>Type of woven fabric structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiffon</td>
<td>Plain weave (answer given)</td>
</tr>
</tbody>
</table>

4 Complete the table below to give the type of woven structure for each named fabric.

An example has been completed for you.

1 mark for each correct answer, up to a maximum of 5 marks.

If two or more answers are given and one of them is incorrect, no marks awarded.

Do not award marks for ‘three spun weave’, ‘pile weave’ or ‘three system weave’
Accept ‘cut loop’ (velvet) and ‘uncut loop’ (terry towelling)
Describe the type of production system used to manufacture a seasonal high street fashion top. Explain how manufacturers ensure that processes, systems and the workforce keep up with changes in demand.

5-6 marks | Demonstrates excellent knowledge and understanding of a wide variety of points regarding both batch production and quick response manufacturing (QRM). Student applies knowledge of batch production methods to the seasonal context of a set number of products to be made. Explains in detail how manufacturers can keep up with changes in demand. At the top end of mark band student will refer to use of computer controlled systems to increase efficiency and speed response time to changes in demand.

3-4 marks | Demonstrates good knowledge and understanding of a range of points regarding batch production and quick response manufacturing (QRM) and provides some detail in their explanation applying knowledge to a set number of products to be made. There may be little or no reference to use of computers.

1-2 marks | Demonstrates basic knowledge and understanding of batch production with little or no explanation or application of knowledge to production of a set number of products. May only mention the most obvious points concerning quick response manufacturing (QRM) with little detail given. At the lower end of the mark band student may give information about only batch production, they may give incorrect production system but give valid points regarding QRM.

0 marks | No response worthy of credit.

**Indicative content:**
- Correct answer is batch production during which teams of workers
make a set number of identical products in one production run. Batch size varies from only a few items manufactured to over 100,000 products made in a batch.

Manufacturers can respond quickly to changes in demand using quick response manufacturing (QRM).

- This is where workers are grouped in teams and each team is responsible for the quality and rate of production within the team.
- Machines are arranged in a horseshoe shape and workers move between the machines as required, passing the work onto the next person within the team.
- Workers are trained to carry out a variety of different processes so they can work flexibly within the team to complete orders as quickly as possible.
- Multi-skilled workers can make small batches of a wide range of products quickly.
- Use of computer controlled systems for production increases efficiency in process control and stock management, including use of barcodes to track products at each stage of production.
- Just In Time (JIT) manufacture to increase efficiency and decrease waste by receiving the materials used in manufacture only as they are required during the production process. This reduces the cost of storing stock and damage to stock.

Award any other valid responses.

| 5 | 2 | The high street fashion top includes standardised components. | 3 marks | AO4 |

Give **three** advantages of using standardised components when manufacturing a garment.

**Indicative content:**

1 mark for any appropriate answer, up to a maximum of 3 marks.

- Sourcing standardised components will be straightforward and there may be more choice of supplier.
- Standardised or pre-manufactured components can be ordered from supplier’s stock.
- Just in time (JIT) stock control can be used for standardised components to increase efficiency and reduce costs of storage and potential damage to component stock.
- Standardised components are less expensive than made to order components so would reduce overall cost of product compared to using individually designed components.
- Standard sized and shaped components can be applied to products using existing machines and standard machine settings which reduces production set up time and production costs.
- Manufacturers do not need to invest in specialist machines to make individual components.
A manufacturer produces fashion tops. In a batch of 2600 fashion tops, 9% are faulty.

The manufacturer introduces further training for the workforce in order to reduce the number of faulty fashion tops.

A batch of 1250 are now produced. The percentage of faulty fashion tops in this batch is reduced by 12%.

Work out the number of faulty fashion tops in each batch, to the nearest whole number. Show your working.

<table>
<thead>
<tr>
<th>Number faulty in batch of 2600</th>
</tr>
</thead>
</table>
| \[
\frac{9}{100} \times 2600 \\
\text{or } 0.09 \times 2600 \\
234
\]

<table>
<thead>
<tr>
<th>Percentage faulty in batch of 1250</th>
</tr>
</thead>
</table>
| \[
\frac{12}{100} \times \frac{9}{100} \\
\text{or } 0.12 \times 0.09 \\
\text{or } 1.08\% \\
\text{and } 9\% - 1.08\% \\
\text{or } 7.92\% \\
\text{or } 100\% - 12\% = 88\% \\
\text{and } \frac{88}{100} \times \frac{9}{100} \\
\text{or } 0.88 \times 0.09 \\
\text{or } 7.92\% \\
\]

<table>
<thead>
<tr>
<th>Number faulty in batch of 1250</th>
</tr>
</thead>
</table>
| \[
\frac{88}{100} \times \frac{9}{100} \times 1250 \\
\]
or \( \frac{7.92}{100} \times 1250 \)  

or \( 0.0792 \times 1250 \)  

99

<table>
<thead>
<tr>
<th>6</th>
<th>Discuss how fabric choice can affect the wider issues surrounding the care and disposal of fashion and textile products.</th>
<th>12 marks</th>
<th>AO3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In your answer give examples of different fibre types, fabric structures and applied finishes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marks</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-12 marks</td>
<td>Candidate shows excellent analysis and evaluation of the wider issues related to the choice of fabrics for fashion and textile products. A wide range of points regarding care and disposal of fashion and textile products are explained with reference to a detailed range of specific associated wider issues. Information is accurate and clearly related to the choice of fabric. At the top end of mark band student will refer to examples of different types of fibres, fabric structures and applied finishes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-9 marks</td>
<td>Candidate shows very good analysis and evaluation of the wider issues related to the choice of fabrics for fashion and textile products. A variety of points regarding care and disposal of fashion and textile products are explained with reference to some detail associated with wider issues. Information is mainly accurate and is related to the choice of fabric. Student will refer to some examples of different types of fibres, fabric structures or applied finishes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6 marks</td>
<td>Candidate shows fairly good analysis and evaluation of the wider issues related to the choice of fabrics for fashion and textile products. A variety of points regarding care and/or disposal of fashion and textile products are explained with reference to a range of the associated wider issues. Information will be fairly accurate. Student may refer to one or more examples of different types of fibres, fabric structures or applied finishes but there may be little information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 marks</td>
<td>Candidate shows basic analysis and evaluation of the wider issues related to the choice of fabrics for fashion and textile products. Simple points regarding care and/or disposal of fashion and textile products are given. Reference to wider issues may be inaccurate, confused or have little relevance to the choice of fabric. There may be little or no reference to examples of different types of fibres, fabric structures or applied finishes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 marks</td>
<td>No response worthy of credit.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicative content:**

**Care:**
- Easy care fabric made from a blend of polyester and cotton
reduces the absorption of water, shrinkage and creasing during fabric washing, compared to 100% cotton fabric. This means that these fashion and textile products retain their dimensions, and because they need less ironing and can be dried more quickly use less energy during laundering which makes them more sustainable.

- Woven fabrics are usually more stable than knitted fabric and will retain shape better during care - weft knits easily distort during washing and require more careful handling.
- Satin and open weave or open knit fabric may be easily damaged during washing as fibres or yarns may snag.
- Nano-technology fabrics can be self-cleaning and so require less washing or cleaning.
- Fabrics with low absorbency use less energy for drying as do fabrics that can be washed and ironed at low temperatures and so are more sustainable.
- Fabrics with a stain repellent finish reduce the need for cleaning and the use of detergents, water and energy to power washing and drying machines. However, some finishing chemicals give off poisonous chemicals when the fabric breaks down in landfill.
- Fabric which has a non-crease/non-iron finish or a shrink resistant resin finish for cellulosic and wool fibres, is simpler and less resource and time consuming to care for.
- Fabric made from Superwash wool with antifelting finish or Teflon® coating will be easier to care for than standard wool fabric.
- Fabric enhanced with embroidery or quilting requires extra care when cleaning.
- Fabric that is colourfast to washing will be easier to wash than fabric where the dye runs or fades.
- Chemicals used in dry cleaning may cause eutrophication if they are released into rivers and lakes. This is where algae growth forms a bloom over the water surface and as a result aquatic plants and animals are starved of oxygen.

Disposal:

- Fabrics that are more durable and can be repaired will last longer and so fashion and textile products made from durable fabric will not need to be replaced so frequently and there will be less need to dispose of them in landfill or to incinerate them. When such products are no longer wanted, they can be reused by others so selecting durable fabric will reduce the impact on the environment.
- During disposal of fashion and textile products, fabrics with blended fibres make recycling more complicated as fibres need to be separated out into type of fibre. Fabric from which it is simple to reclaim fibres is more sustainable as fibres can be reused in a closed loop of fibre use as ‘cradle to cradle’ clothing or textile products.
- Biodegradable fabrics have less impact on the environment when disposed of in landfill. Those made from synthetic fibres do not biodegrade easily whereas fabrics made from natural fibres will rot.
down in landfill. Fabric with fibres produced organically will also be free of any toxic chemical traces.

- Fabrics made from synthetic fibres such as polyester can be recycled and made into new polyester fabric with zero waste rather than being disposed of into landfill or incinerated.
- Non-woven disposable fabrics which are not reused require no after care; they may be biodegradable or recyclable which will determine method of disposal.
- Some micro fibre fabrics may release tiny fibres into the water system that end up polluting the oceans. This may influence consumers to wash the item less frequently or recycle the garment before it gets too worn.

Award any other valid responses.
## Section B: Design and Making Principles

<table>
<thead>
<tr>
<th>Marks</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Music and film often influence fashion. Explain some of these influences giving examples from different periods since 1900.</td>
<td>Demonstrates excellent understanding of a wide variety of points relating to the influence of music and film on fashion. Explains in detail how fashion is influenced and gives detailed examples of a wide variety of fashions inspired by music and film from a range of different periods since 1900.</td>
</tr>
<tr>
<td>5-6</td>
<td>Demonstrates very good understanding of a variety of points relating to the influence of music and film on fashion. Provides some detail in their explanation of how fashion is influenced referencing a variety of examples of fashions of music and film from some different periods since 1900.</td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td>Demonstrates fairly good understanding of some points relating to the influence of music and film on fashion. Explanation lacks detail and includes only a few examples of how fashion is influenced. Student may refer to only music or film from one or more different periods since 1900.</td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>Demonstrates basic understanding of the influence of music and film on fashion. Little or no explanation of how fashion is influenced. May give only one or two examples of how fashion is influenced. May only mention the most obvious points concerning music or film from one or more different periods since 1900.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>No response worthy of credit.</td>
<td></td>
</tr>
</tbody>
</table>

### Indicative content:

- Popular music, key singers and bands capture the interests of the audience and inspire fashions which imitate the performers’ stage looks, way of dressing, styles of clothing and choice of garment. Fashion designers are quick to pick up on the key elements and translate them into clothing which is then sold commercially.
- Popular films not only set fashion trends but also pick up on fashion trends in the styling of the costumes in order to produce commercially appealing and successful films. The main characters, themes, historical, cultural or futuristic contexts connect with the audience and inspires them to dress following the fashions seen in the film.

Examples of fashions influenced by music:
- Ragtime music and other energetic dance music in dance halls around 1915 onwards influenced a fashion for dresses that were slimmer, with higher hemlines, trimmed with fringes and beads.
and slits that allowed more freedom of movement for women. This continued into the 1920s with Jazz music and short, straight dresses that had a flat chested silhouette with a dropped waistline worn by the young modern women known as 'flappers'. This was a more modern boyish, androgynous or adolescent look known as the ‘garçonne’ look.

- In the mid-1950s rock and roll music began to revolutionise pop music and the rock stars began to replace film stars as the new idols who influenced fashion trends. Elvis Presley, James Dean and Marlon Brando portrayed a macho type of young man and their style of dressing included leather motorbike jackets, T-shirts, blue jeans and boots.

- During the 1960s the Beatles influenced fashion trends. Slim fitting, high fastening collarless jackets, originally designed by Pierre Cardin for John Steed, a leading character in the British TV series The Avengers were worn with slim-fitting trousers and boots.

- In the 1970s Punk Rock music influenced a fashion trend for black or strong colours such as shocking pink with a torn distressed look enhanced with safety pins and chains. Loose T-shirts with slogans printed on them, trousers called ‘bondage trousers’, joined together at the back with loose dangling straps and high-laced leather or rubber combat boots.

- The Glam Rock and New Romantic image of pop stars such as David Bowie, Boy George and Adam Ant influenced more flamboyant fashion trends for men.

- Rap music and Hip-Hop styles became part of mainstream street fashion during the 1980s. Half-mast jeans, baseball caps and undone shoe laces and very baggy, casual layered oversized sportswear styles became popular. The fashion trend for wearing trainers or sneakers boomed in the 1980s; Converse, Nike and Adidas are key fashion brands with updated fashion trends often triggered by celebrity endorsement.

Examples of fashions influenced by film:

- During 1930s listening to radio and going to the cinema was very popular. Glamorous American film stars had a strong influence on fashion trends. Greta Garbo and Marlene Dietrich were two of the biggest superstars of the 1930s and set a trend for wearing trench coats with dark glasses.

- Breakfast at Tiffany’s (1961) Audrey Hepburn’s ‘little black dress’ and black evening gloves with tiara and pearls created a style incorporating black dresses or the ‘LBD’.

- Pierre Cardin’s 1968 collection was inspired by the exploration of space and films such as 2001: Space Odyssey which had just been released. This inspired a futuristic space age fashion trend featuring modern materials, bright block coloured tunics and leggings along with fabric helmets, and over-sized buttons, visible zips sunglasses.

- The film Dr Zhivago influenced a fashion trend for lower calf and ankle length fur trimmed ‘Zhivago coats’, usually worn over miniskirts and boots.

Award any other valid responses.

<table>
<thead>
<tr>
<th>8</th>
<th>Discuss why there was a mixed reaction to Christian Dior’s ‘New Look’ fashion. Describe the main features of the style and how they influenced fashion design.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6 marks</td>
<td>Demonstrates excellent analysis and evaluation, clearly understands what is meant by Christian Dior’s ‘New Look’ fashion and provides detailed analysis and evaluation of the fashion silhouette with specific reference to body shaping under garments. Detailed explanation of why there was a mixed reaction to the fashion with a wide variety points to evaluate the mood of the times and detailed analysis and evaluation of how this effected the fashion silhouette and use of materials. At the top of this mark band, student may make reference to corselettes/waspies.</td>
</tr>
<tr>
<td>3-4 marks</td>
<td>Demonstrates good analysis and evaluation, understands what is meant by Christian Dior’s ‘New Look’ fashion. Student provides some analysis and evaluation of the fashion silhouette and may refer to body shaping under garments. Some explanation of why there was a mixed reaction to the fashion in the post war context and some analysis and evaluation of how this effected the fashion silhouette and use of materials.</td>
</tr>
<tr>
<td>1-2 marks</td>
<td>Demonstrates basic analysis and evaluation. Some understanding of what is meant by Christian Dior’s ‘New Look’ fashion but provides little information about the fashion silhouette with little or no reference to body shaping under garments. Student offers little or no explanation of why there was a mixed reaction to the fashion in the post war context with little or no analysis or evaluation of how this effected the fashion silhouette and use of materials.</td>
</tr>
<tr>
<td>0 marks</td>
<td>No response worthy of credit.</td>
</tr>
</tbody>
</table>

Indicative content:
Dior’s ‘New Look’ fashion was launched in 1947 after the Second World War. Many people were still living in poverty and still suffering the food and clothing shortages and rationing caused by the war and wearing utilitarian clothing which required the minimum fabric. Other people in society were keen to move away from the constrictions of the post war period and embrace a more flamboyant style of fashion. Feminists wanted to keep women liberated from the restraints of tight constricting clothing and corsets that limited both movement and opportunity to take on the full range of roles within society. Tight clothing that accentuated the female form perhaps supported the idea that women should be back in the home and some felt it to be a backwards step. Corsets and long styles had already been largely replaced with fashionable less restricting styles in the 1920’s and 1930’s and during the war clothing for women had been practical in line with their new wartime work roles. The ‘New Look’ was a nostalgic extravagant style that was radically feminine and some people thought looked back to better times when women could be glamorous and wear clothes that were not styled for the work place. The ‘New Look’ fashion silhouette featured a nipped in waist, padded hips and a full long skirt to calf level; the shape was curvy and very feminine. Bras lifted and shaped the breasts, boned corselettes called ‘waspies’ minimalised the waist. Fitted jackets accentuated the female shape. Hip padding and full petticoats flared the skirt into an A Line. Full circle skirts were popular in the 1950’s influenced by the ‘New Look’ fashion silhouette.

Award any other valid responses.
Explain how a basic bodice block could be adapted to move fullness from the bust to the waist.

You may use diagrams in your answer to explain the method.

<table>
<thead>
<tr>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6</td>
<td>Demonstrates excellent knowledge of adjusting a block pattern and moving darts to create fullness in style. Recalls the correct method and gives full details of how this is done in a clear and precise account in detailed steps.</td>
</tr>
<tr>
<td>3-4</td>
<td>Demonstrates good knowledge of adjusting a block pattern and moving darts to create fullness in style. Recalls some details of the correct method and gives a fairly clear guide to the steps involved which would mostly achieve the desired outcome.</td>
</tr>
<tr>
<td>1-2</td>
<td>Demonstrates basic knowledge of adjusting a block pattern and moving darts to create fullness in style. There may be some confusion in stating the correct method and may be incomplete stages or steps in the procedure that lack any detail or clarity.</td>
</tr>
<tr>
<td>0</td>
<td>No response worthy of credit.</td>
</tr>
</tbody>
</table>

Indicative content:

- Cut the pattern along the lower dart line towards the bust ending at the point of the dart/bust.
- Cut a vertical line from the waistline to the point of the dart/bust.
- The section of the pattern which is released is pivoted from the point of the dart/bust moving the lower dart line to line up with the upper dart line.
- An extra piece of cross and dot pattern paper is inserted into the gap to extend the pattern piece.
- The adjusted pattern piece can be traced around to make a new pattern piece redrafted to include all pattern notation.

Diagrams may be used in the answer.
Evaluate the influence of different types of third party feedback on product development.

<table>
<thead>
<tr>
<th>Marks</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6</td>
<td>Demonstrates excellent analysis and evaluation. Clearly understands what is meant by third party feedback and makes clearly explained judgements about the importance to and impact of different types of this collected data on product development. Explanation includes a wide range of very detailed points about why third party feedback is used and the influence of the data collected on the development of prototypes. At the top of this mark band, candidate will make reference to objective and unbiased feedback.</td>
</tr>
<tr>
<td>3-4</td>
<td>Demonstrates good evaluation and analysis. Understands what is meant by third party feedback and makes some judgement as to the value of different types of third party feedback. Some detailed points are given to explain why these methods of third party feedback are used. There is some reference to the influence of the data collected on the development of prototypes.</td>
</tr>
<tr>
<td>1-2</td>
<td>Demonstrates basic analysis with little evaluation when explaining why third party feedback is used when testing and evaluating prototypes. There may be some confusion about the difference between the methods of collecting third party feedback and why they are used. Little or no reference to how the data collected will inform or support prototype development decisions with little or no judgement on the value of third party feedback.</td>
</tr>
<tr>
<td>0</td>
<td>No response worthy of credit.</td>
</tr>
</tbody>
</table>

Indicative content:

- Third party feedback is used to understand the objective and unbiased opinions of potential customers within the target market and to understand the requirements for a successful design.
- If the product was only tested by those involved in developing the product, they would miss issues raised in feedback from a first-time user of the product.
- This type of market research is used to make sure that fashion and textiles products are fit for purpose and that they perform to the expected standards.
- The data is used as part of user centred design (UCD) to develop a new product according to what the consumers need or want by frequently checking with the likely users that the design of the product is still relevant to them.
- Interviews are held with the target market to find out answers to brief questions (quantitative interviews), and more in-depth questions (qualitative interviews) to find out about the success of
the product prototype and potential for further development.
- Focus groups are used to gather immediate feedback from the target market by showing potential consumers initial concepts and storyboards through to working prototypes and from observing the final product in use.
- Focus groups provide the opportunity for the target market to try out product prototypes to give feedback about usability and product appeal.
- Consumer panels are used to get feedback at intervals throughout the design, development and final product stages. They give feedback concerning the faults, problems and further development of the product.
- Interviews, focus groups and consumer panels help product development teams find out how, when and under what conditions the target market will use the product and the data collected will inform development decisions.
- Product developers need to know if the design proposal is desirable, useful, performs well and satisfies the customer and the collected third party data will provide the evidence to support design development decisions.
- Market research helps a business decide whether to continue to develop an idea or product design before money has been spent on the full development of the design or the manufacturing of the product.
- If an existing product design is to be reused for next seasons collection, online reviews from consumers may be used to inform further product development.

Award any other valid responses.
In a survey, students were asked about their preference for style of school bag. Each student had one vote only.

Complete the table to show the results of the survey for presentation in a pie chart.

Show your working.

<table>
<thead>
<tr>
<th>Style of school bag</th>
<th>Number of votes</th>
<th>Percentage of votes (%)</th>
<th>Pie chart angle (°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruck sack</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder bag</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tote bag</td>
<td>33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of students
72 + 45 + 33
or 150

Fractions or percentage for each type of school bag
At least two from
\[
\frac{72}{150} \quad \text{or 0.48 or 48%}
\]
and
\[
\frac{45}{150} \quad \text{or 0.3 or 30%}
\]
and
\[
\frac{33}{150} \quad \text{or 0.22 or 22%}
\]

Pie chart angles
\[
0.48 \times 360 = 173 (^\circ)
\]
and \[
0.30 \times 360 = 108 (^\circ)
\]
and \[
0.22 \times 360 = 79 (^\circ)
\]
or 172.8
108
79.2
A fancy dress costume includes a witch’s hat made of felt.

- One piece of felt is used for the cone shape (excluding the base of the cone)
- Two rings of felt are used for the brim as it is a double thickness

Work out the amount of felt used for each hat, excluding the waste fabric. Give your answer to 2 significant figures.

Curved surface area of cone = \( \pi \sqrt{h^2 + r^2} \) where \( r \) is the radius of the cone base and \( h \) is the vertical height of the cone.

Show your working.

<table>
<thead>
<tr>
<th>12</th>
<th>A fancy dress costume includes a witch’s hat made of felt.</th>
<th>Total 6 marks</th>
<th>AO4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work out the amount of felt used for each hat,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>excluding the waste fabric. Give your answer to 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>significant figures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Curved surface area of cone = ( \pi \sqrt{h^2 + r^2} )</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>where ( r ) is the radius of the cone base and ( h</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>is the vertical height of the cone.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Show your working.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Cone diagram](image)

Curved surface area of cone
\[
p \times 10 \times \sqrt{45^2 + 10^2}
\]

or \( p \times 10 \times \sqrt{2025 + 100} \)

or \( p \times 10 \times \sqrt{2125} \)

\[ [1447, 1449] \text{ (cm}^2) \]

Area of hat brims
\[
p \times 21^2 - p \times 10^2
\]

or \( 441p - 100p \)

or \( 341p \)

or \([1070, 1072] \text{ (cm}^2)\)

or \( (p \times 21^2 - p \times 10^2) \times 2 \)

or \( (441p - 100p) \times 2 \)

or \( 341p \times 2 \)
<table>
<thead>
<tr>
<th>[2140, 2144] (cm²)</th>
<th>1 mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total surface area</td>
<td>1 mark</td>
</tr>
<tr>
<td>[1447, 1449] + [1070, 1072] × 2 or [3587, 3593]</td>
<td>1 mark</td>
</tr>
<tr>
<td>Total surface area 3600cm² or 0.36m²</td>
<td>1 mark</td>
</tr>
</tbody>
</table>

**Additional guidance**

Accept values for π in the range [3.14, 3.142]