



# **2012 Fashion and Textile Technology**

## **Higher – Technological Project**

### **Finalised Marking Instructions**

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**STEP 1 Total mark allocation – 22 marks**

**1 : 1 Identification of the key points with explanation – 6 marks available**

The candidate should identify the 'core' key points – these are all the main key words of the Technological Project brief.

The number of 'core' key points which can be identified will depend on the wording of the Technological Project brief.

Candidates should number each key point identified.

**Identify the key points – 3 marks**

|   |         |
|---|---------|
| Candidates who record all the 'core' key points.                    | 2 marks |
| Candidates who record ½ or more, but not all the 'core' key points. | 1 mark  |
| Candidates who record less than ½ the 'core' key points.            | 0 marks |

Candidates who provide an additional key point, other than those identified as 'core' will be awarded an additional **1 mark**.

**Basic and accurate explanation of key points – 2 marks**

Marks are determined by the number of key points which have a basic and accurate explanation.

|   |         |
|---|---------|
| If all key points have a basic and accurate explanation.                          | 2 marks |
| If ½ or more but not all of the key points have a basic and accurate explanation. | 1 mark  |
| If less than ½ the key points have a basic and accurate explanation.              | 0 marks |

**Detailed and accurate explanation – 1 mark**

Candidates who provide further accurate detail within the explanations will be awarded an additional mark. Extra detail means one additional point of explanation is provided for any one of the key or additional points.

**Brief 1**

Develop a textile item incorporating recycled materials.

**Brief 2**

Develop a textile item for a party range for teenagers.

**Brief 1**

**Key points**

1. develop
2. (a) textile
3. item
4. incorporating
5. recycled
6. materials.

**Brief 2**

**Key points**

1. develop
2. (a) textile
3. item
4. (for a) party
5. range
6. (for) teenagers.

### **Example of basic accurate explanation of key points**

**Develop** • create or devise ideas for a new item

### **Example of further accurate detail in explanation of key points**

**Develop** • create or devise ideas for a new item  
• make an item which is original or different to what is available at present

#### **Brief 1 – Recycled materials Additional Key Points**

7. Facilities/resources/time available
8. Aesthetic appeal
9. Skills/abilities
10. Hygiene/ease of care
11. Safety
12. Likes/dislikes/appeal to target group
13. Money available/budget of target group
14. Current market trends/fashion
15. Quality/standard required for sale
16. Gender of target group
17. Age range of target group
18. Suitable for mass production
19. Allergies
20. Season of year

#### **Brief 2 – Party range Additional Key Points**

7. Facilities/resources/time available
8. Aesthetic appeal
9. Skills/abilities
10. Hygiene/ease of care
11. Safety
12. Likes/dislikes/appeal to target group
13. Money available/budget of target group
14. Current market trends/fashion
15. Quality/standard required for sale
16. Gender of target group
17. Age range of target group
18. Suitable for mass production
19. Allergies
20. Season of year

**1 : 2 Draw up appropriate criteria for a specification – 10 marks available**

**Candidate's specification allows for a range of possible solutions 1 mark**

|  |         |
|--|---------|
| Specification allows for a range of possible solutions which are relevant to the brief | 1 mark  |
| If a range of solutions is not possible – 0 marks                                      | 0 marks |

**Candidate provides five specification points, each containing more detail than the brief 2 marks**

Note: Candidates are expected to provide a **minimum of five** specification points. However due to constraints of the time allocated for the Technological Project the candidates should not identify more than seven specification points as this would involve the candidate in unnecessary work.

Specification points must be **valid** (derived from the brief) to gain marks in this section. When drawing up the criteria for the specification candidates should not just rewrite the key points – greater detail is required.

|   |         |
|---|---------|
| Five <b>valid</b> specification points contain more detail than the brief.            | 2 marks |
| Three or four <b>valid</b> specification points contain more detail than the brief.   | 1 mark  |
| Less than three <b>valid</b> specification points contain more detail than the brief. | 0 marks |

**Candidate has written all specification points in measurable/able to be tested terms 2 marks**

Candidates must indicate how each specification point should be able to be measured/tested by a valid method.

|  |         |
|--|---------|
| All specification points are measurable/tested.                    | 2 marks |
| ½ or more, but not all specification points are measurable/tested. | 1 mark  |
| Less than ½ the specification points are measurable/tested.        | 0 marks |

**Candidate has linked each specification point to the key points and additional key point(s)**

**2 marks**

Candidates must show that each specification point is linked to the key points and additional key points identified in Step 1 : 1. All key points should be covered.

|   |         |
|---|---------|
| Specification points are linked to all key points and additional key points.                    | 2 marks |
| Specification points are linked to ½ or more, but not all key points and additional key points. | 1 mark  |
| Specification points are linked to less than ½ the key points and additional key points.        | 0 marks |

**Candidate provides basic explanations**

**2 marks**

Basic explanations of the specification points, relevant to the project brief, should be provided by the candidate.

|  |         |
|--|---------|
| Basic explanations are provided for all specification points.                    | 2 marks |
| Basic explanations are provided for ½ or more, but not all specification points. | 1 mark  |
| Basic explanations are provided for less than ½ the specification points.        | 0 marks |

**Candidate provides detailed explanation**

**1 mark**

If further detail, relevant to the project brief, is provided within the explanation then an additional mark will be awarded. Extra detail means one additional point if explanation is provided for any one of the specification points.

| <b>Step 1.2 Specification</b>       |  |  |   |
|-------------------------------------|--|--|---|
| <b>Brief 1 – Recycled materials</b> |  |  |   |
| <b>Item must:</b>                   |  | <b>Measured by:Technique</b>   | <b>Identified expert:</b>   |
| 1                                   | <ul style="list-style-type: none"> <li>be made of fabric</li> </ul>  | <ul style="list-style-type: none"> <li>Interview</li> <li>Resources/component checklist</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/Trading Standards Officer/textile retailer/designer</li> </ul>  |
| 2                                   | <ul style="list-style-type: none"> <li>be made using suitable fabrics</li> </ul>   | <ul style="list-style-type: none"> <li>User/wearer trial of prototype</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/textile retailer/designer/appropriate expert</li> </ul>   |
| 3                                   | <ul style="list-style-type: none"> <li>take account of current fashion trends/be fashionable</li> </ul>                  | <ul style="list-style-type: none"> <li>Interview</li> <li>Internet/literary search</li> <li>Interview/questionnaire</li> </ul>                                     | <ul style="list-style-type: none"> <li>Textile technologist/retailer/designer/manufacture</li> <li>Confirmed by a specified expert</li> <li>Target group</li> </ul>   |
| 4                                   | <ul style="list-style-type: none"> <li>incorporate/include recycled materials/components</li> </ul>                      | <ul style="list-style-type: none"> <li>Interview/survey</li> <li>Internet search</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/appropriate teacher/retailer/designer/appropriate expert</li> </ul>   |
| 5                                   | <ul style="list-style-type: none"> <li>be different to other products/be original</li> </ul>                             | <ul style="list-style-type: none"> <li>Check against current products</li> <li>Interview</li> <li>Internet search</li> </ul>                                       | <ul style="list-style-type: none"> <li>Retailer/textile technologist/designer</li> </ul>  |
| 6                                   | <ul style="list-style-type: none"> <li>be a single item/product</li> </ul>   | <ul style="list-style-type: none"> <li>Questionnaire</li> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Retailer</li> <li>Textile technologist/retailer</li> </ul>   |
| 7                                   | <ul style="list-style-type: none"> <li>be comparable in cost to other similar items</li> </ul>                           | <ul style="list-style-type: none"> <li>Costing exercise &amp; price check/comparison</li> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/retailer</li> </ul>   |
| 8                                   | <ul style="list-style-type: none"> <li>be cost effective to produce/be good value for money</li> </ul>                   | <ul style="list-style-type: none"> <li>Costing exercise &amp; interview</li> <li>Costing exercise &amp; interview/questionnaire</li> </ul>                         | <ul style="list-style-type: none"> <li>Textile technologist/retailer</li> <li>Target group</li> </ul>   |
| 9                                   | <ul style="list-style-type: none"> <li>be within the budget of the target group</li> </ul>                               | <ul style="list-style-type: none"> <li>Costing exercise &amp; questionnaire</li> <li>Costing exercise &amp; interview</li> </ul>                                   | <ul style="list-style-type: none"> <li>Target group</li> <li>Textile technologist/retailer/target group</li> </ul>  |
| 10                                  | <ul style="list-style-type: none"> <li>be suitable for the target group</li> </ul>                                       | <ul style="list-style-type: none"> <li>Questionnaire/interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/target group/retailer/designer/appropriate expert</li> </ul>  |
| 11                                  | <ul style="list-style-type: none"> <li>be aesthetically pleasing to target group</li> </ul>                              | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> <li>Interview</li> <li>Sensory testing</li> <li>User/wearer trial of prototype</li> </ul>      | <ul style="list-style-type: none"> <li>Target group</li> <li>Textile technologist/retailer</li> <li>Target group</li> </ul>   |
| 12                                  | <ul style="list-style-type: none"> <li>Take account of likes/dislikes of target group</li> </ul>                         | <ul style="list-style-type: none"> <li>Questionnaire/survey</li> <li>Interview</li> <li>Sensory testing</li> </ul>   | <ul style="list-style-type: none"> <li>Target group</li> <li>Textile technologist/retailer</li> <li>Target group</li> </ul>   |
| 13                                  | <ul style="list-style-type: none"> <li>be of an acceptable/satisfactory standard</li> </ul>                              | <ul style="list-style-type: none"> <li>Interview</li> <li>Sensory testing</li> <li>Quality checklist &amp; interview</li> </ul>                                    | <ul style="list-style-type: none"> <li>Textile technologist/Trading Standards Officer/retailer/target group</li> <li>Target group/textile technologist/retailer</li> <li>Textile technologist/retailer</li> </ul> |
| 14                                  | <ul style="list-style-type: none"> <li>be durable</li> </ul>   | <ul style="list-style-type: none"> <li>User/wearer trial of prototype</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Trading Standards Officer/textile technologist/retailer</li> </ul>   |
| 15                                  | <ul style="list-style-type: none"> <li>be made using the time/facilities/resources available to the candidate</li> </ul> | <ul style="list-style-type: none"> <li>Interview</li> <li>Checklist of facilities/component checklist</li> <li>Timed trial of prototype &amp; interview</li> </ul> | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Verified by expert</li> <li>Textile technologist</li> </ul>  |

| Item must: | Measured by: Technique   | Identified expert:   |  |
|------------|--|--|--|
| 16         | <ul style="list-style-type: none"> <li>• be within the capabilities/skills of the candidate to produce</li> </ul>                      | <ul style="list-style-type: none"> <li>• Trial of prototype</li> <li>• Quality checklist</li> <li>• Interview</li> <li>• Skills analysis</li> </ul>                      | <ul style="list-style-type: none"> <li>• Textile technologist</li> <li>• Confirmed by an expert</li> </ul>   |
| 17         | <ul style="list-style-type: none"> <li>• be made using the time/facilities/resources available to the manufacturer/designer</li> </ul> | <ul style="list-style-type: none"> <li>• Timed trial of prototype &amp; interview</li> <li>• Interview</li> <li>• Checklist of facilities/component/checklist</li> </ul> | <ul style="list-style-type: none"> <li>• Textile technologist/manufacturer/designer</li> <li>• Textile technologist/manufacturer/designer</li> </ul> |
| 18         | <ul style="list-style-type: none"> <li>• be within the capabilities/skills of the designer/manufacturer to produce</li> </ul>          | <ul style="list-style-type: none"> <li>• Trial of prototype</li> <li>• Quality checklist</li> <li>• Interview</li> </ul>   | <ul style="list-style-type: none"> <li>• Textile technologist/designer</li> </ul>  |
| 19         | <ul style="list-style-type: none"> <li>• be made under hygienic/safe conditions</li> </ul>   | <ul style="list-style-type: none"> <li>• Interview</li> <li>• Quality checklist &amp; interview</li> </ul>   | <ul style="list-style-type: none"> <li>• Textile technologist</li> <li>• Textile technologist</li> </ul>   |
| 20         | <ul style="list-style-type: none"> <li>• be safe in use/wear</li> </ul>  | <ul style="list-style-type: none"> <li>• Interview</li> <li>• Literary/Internet search and quality checklist</li> </ul>  | <ul style="list-style-type: none"> <li>• Textile technologist/retailer/manufacturer/Trading Standards Officer</li> </ul>                             |
| 21         | <ul style="list-style-type: none"> <li>• be suitable for mass production</li> </ul>  | <ul style="list-style-type: none"> <li>• Interview</li> </ul>  | <ul style="list-style-type: none"> <li>• Textile technologist</li> </ul>   |
| 22         | <ul style="list-style-type: none"> <li>• be able to be laundered/be easy to care for</li> </ul>  | <ul style="list-style-type: none"> <li>• Interview</li> <li>• User/wearer trials of prototype</li> </ul>   | <ul style="list-style-type: none"> <li>• Textile technologist/retailer</li> </ul>  |
| 23         | <ul style="list-style-type: none"> <li>• influencing factors on final products</li> </ul>  | <ul style="list-style-type: none"> <li>• Interview</li> </ul>  | <ul style="list-style-type: none"> <li>• Textile technologist/retailer/designer/appropriate expert</li> </ul>  |

**Note:**

- A textile technologist could include a person working in textile product development or a Home Economics teacher.

- NB**
- **Specification Points** – It must be checked that the specification points are different.  
– A candidate may use different wording to state the same thing.
  - **Measured by** – The candidate must specify the term ‘expert’ if used.

**Method of measuring must be able to check/assess whether the specification point has been met.**

**Basic explanation of specification point**

- be colourful/attractive/appealing to target group
- so the target group will like them

**Detailed explanation of specification point**

- be colourful/attractive/appealing to target group
- to encourage the target group or consumer to try the product again

| <b>Step 1.2 Specification</b>              |  |   |   |
|--|--|---|---|
| <b>Brief 2 – Party range for teenagers</b> |  |   |   |
| <b>Item must:</b>                          | <b>Measured by: Technique</b>  | <b>Identified expert:</b>   |   |
| 1  | <ul style="list-style-type: none"> <li>be made of fabric</li> </ul>  | <ul style="list-style-type: none"> <li>Interview</li> <li>Resources/component checklist</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/Trading Standards Officer/textile retailer</li> </ul>   |
| 2  | <ul style="list-style-type: none"> <li>be made using suitable fabrics</li> </ul>                           | <ul style="list-style-type: none"> <li>User/wearer trial of prototype</li> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist</li> </ul>  |
| 3  | <ul style="list-style-type: none"> <li>be suitable for teenagers</li> </ul>                                | <ul style="list-style-type: none"> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer/teenagers</li> </ul>   |
| 4  | <ul style="list-style-type: none"> <li>be different to other products on the market/be original</li> </ul> | <ul style="list-style-type: none"> <li>Literary/Internet search</li> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/retailer/designer</li> </ul>  |
| 5  | <ul style="list-style-type: none"> <li>be a single item/product</li> </ul>                                 | <ul style="list-style-type: none"> <li>Questionnaire/interview</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Retailer</li> <li>Textile technologist/retailer</li> </ul>   |
| 6  | <ul style="list-style-type: none"> <li>be suitable for a party</li> </ul>                                  | <ul style="list-style-type: none"> <li>Questionnaire/interview</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Retailer/parent/carer/teenagers/textile technologist/appropriate expert</li> <li>Textile technologist/retailer/teenagers</li> </ul>  |
| 7  | <ul style="list-style-type: none"> <li>be fashionable/take account of current fashion trends</li> </ul>    | <ul style="list-style-type: none"> <li>Interview</li> <li>Internet/literary search</li> <li>Interview/questionnaire</li> </ul>                                | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer/designer</li> <li>Confirmed by a specified expert</li> <li>Teenagers</li> </ul>   |
| 8  | <ul style="list-style-type: none"> <li>be suitable for inclusion in a party range</li> </ul>               | <ul style="list-style-type: none"> <li>Questionnaire/interview</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Retailer</li> <li>Textile technologist/retailer/teenagers/designer/appropriate expert</li> </ul>   |
| 9  | <ul style="list-style-type: none"> <li>be comparable in cost to other similar items</li> </ul>             | <ul style="list-style-type: none"> <li>Costing exercise &amp; price check/comparison</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer/teenagers/parent/carer</li> </ul>  |
| 10   | <ul style="list-style-type: none"> <li>be cost effective to produce/good value for money</li> </ul>        | <ul style="list-style-type: none"> <li>Costing exercise &amp; interview</li> <li>Costing exercise &amp; questionnaire</li> </ul>                              | <ul style="list-style-type: none"> <li>Textile technologist/retailer/designer/teenagers</li> <li>Teenagers/textile technologist/designer</li> </ul>   |
| 11   | <ul style="list-style-type: none"> <li>be within the budget of teenagers</li> </ul>                        | <ul style="list-style-type: none"> <li>Costing exercise &amp; questionnaire</li> <li>Costing exercise &amp; interview</li> </ul>                              | <ul style="list-style-type: none"> <li>Teenagers/parent/carer</li> <li>Textile technologist/retailer/teenagers/parent/carer</li> </ul>  |
| 12   | <ul style="list-style-type: none"> <li>be aesthetically pleasing/appeal to teenagers</li> </ul>            | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> <li>Interview</li> <li>Sensory testing</li> <li>User/wearer trial of prototype</li> </ul> | <ul style="list-style-type: none"> <li>To teenagers</li> <li>Textile technologist/retailer/designer</li> <li>With teenagers</li> </ul>  |
| 13   | <ul style="list-style-type: none"> <li>take account of likes/dislikes of teenagers</li> </ul>              | <ul style="list-style-type: none"> <li>Questionnaire/survey</li> <li>Interview</li> <li>Sensory testing</li> </ul>  | <ul style="list-style-type: none"> <li>To teenagers</li> <li>Textile technologists/retailer/designer</li> <li>Target group/textile technologist/retailer</li> </ul>   |
| 14   | <ul style="list-style-type: none"> <li>be of an acceptable standard</li> </ul>                             | <ul style="list-style-type: none"> <li>Interview</li> <li>Sensory testing</li> <li>Quality checklist &amp; interview</li> </ul>                               | <ul style="list-style-type: none"> <li>Textile technologist/Trading Standards Officer/retailer/teenagers/parents/carer</li> <li>Teenagers/textile technologist/retailer/designer</li> <li>Textile technologist/retailer/teenagers/parent/carer</li> </ul> |



| <b>Item must:</b>  | <b>Measured by: Technique</b>  | <b>Identified expert:</b>  |
|--|--|--|
| 15<br>• be durable   | • User/wearer trial of prototype<br>• Interview  | • Trading Standards Officer/textile technologist/retailer/manufacturer/designer              |
| 16<br>• be made using the time/facilities/resources available to the candidate             | • Timed trial of prototype & interview<br>• Interview<br>• Checklist of facilities/component checklist | • Textile technologist<br>• Textile technologist   |
| 17<br>• be within the capabilities of the candidate  | • Trial of prototype<br>• Quality checklist<br>• Skills analysis<br>• Interview                        | • Verified by expert<br>• Textile technologist   |
| 18<br>• be made using the time/facilities/resources available to the manufacturer/designer | • Timed trial of prototype & interview<br>• Interview<br>• Checklist of facilities/component checklist | • Textile technologist/designer/manufacturer<br>• Textile technologist/designer/manufacturer |
| 19<br>• be within the capabilities/skills of the designer/manufacturer to produce          | • Trial of prototype<br>• Quality checklist<br>• Interview   | • Textile technologist/designer  |
| 20<br>• be prepared under hygienic/safe conditions   | • Interview  | • Textile technologist/authorised officer  |
| 21<br>• be safe in use/wear  | • Interview<br>• Literary/Internet search<br>• Quality checklist                                       | • Textile technologist/retailer/manufacturer/Trading Standards Officer/designer              |
| 22<br>• be suitable for mass production  | • Interview  | • Textile technologist/manufacturer/designer   |
| 23<br>• be able to be laundered/easy to care for   | • Interview<br>• User/wearer trials of prototype   | • Textile technologist/manufacturer/designer   |
| 24<br>• influencing factors on final product   | • Interview  | • Textile technologist/appropriate expert  |

**Note:**

- A textile technologist could include a person working in textile product development or a Home Economics teacher.

**NB** • **Specification Points** – It must be checked that the specification points are different.  
– A candidate may use different wording to state the same thing.

- **Measured by** – The candidate must specify the term ‘expert’ if used.

**Method of measuring must be able to check/assess whether the specification point has been met.**

**Basic explanation of specification point**

- be colourful/attractive/appealing to target group
- so the target group will like them

**Detailed explanation of specification point**

- be colourful/attractive/appealing to target group
- to encourage the target group or consumer to try the product again

**1 : 3      Devise an overall plan for investigations – 6 marks available**

**Candidate presents a list of investigations (minimum five)**

**2 marks**

Candidates who provide a list of possible investigations which focus clearly on

- the core key points of the project brief
- the candidates specification points
- have a clear aim/purpose

will be awarded **2 marks**.

Candidates who provide a list of investigations which do not focus clearly on the key points and the specification will be awarded **1 mark**.

Obvious omissions from the list of investigations will result in marks being deducted.

**Candidate identifies techniques to be used**

**2 marks**

All techniques must be appropriate for the investigations and so allow the candidate the possibility of collecting relevant data/information.

Where techniques are not consistently appropriate, candidates will be awarded **1 mark**.

**Candidate justifies the need for the investigation**

**2 marks**

All justifications must be

- well thought out
- linked to the investigation.

Lack of clarity within the justification will result in candidates being unable to gain the full mark allocation available.

From the proposed list of investigations drawn up in 1 : 3 above, candidates should form a prioritised list of those investigations which they propose to undertake.

No marks are awarded at this stage but candidates are expected to focus on those investigations most relevant to the needs of the project brief. A number of investigations may be combined by using one technique.

**No more than 3 investigations** depending on their nature, could be realistically carried out in the time available. The three investigations identified should ensure that all specification points are investigated. Candidates will be disadvantaged if they do less than 3 as they will not have collected sufficient data to create a valid solution.

Candidates who intend to use a questionnaire as an investigation must issue a minimum of 20 in order to gain valid results. If, however, too many questionnaires are distributed, collecting the data may become problematic for candidates.

A minimum of 3 website/literary sources should be evident in a **literary/internet search**.

Candidates should complete this work on pages 9 – 11 of the pro forma.

| <b>Step 1.3</b>  |  |   |  |
|--|--|---|--|
| <b>Brief 1 – Recycled materials</b>                      |  |   |  |
| <b>Investigation – to establish/find out/investigate</b> |  | <b>Technique:</b>   | <b>Specified expert:</b>   |
| 1  | <ul style="list-style-type: none"> <li>range of recycled materials/components</li> </ul>                               | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> </ul>   | <ul style="list-style-type: none"> <li>Target group/textile technologist/retailer</li> </ul>   |
| 2  | <ul style="list-style-type: none"> <li>suitable fabrics/range of fabrics available</li> </ul>                          | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> </ul>   | <ul style="list-style-type: none"> <li>Target group/textile technologist/retailer</li> </ul>   |
| 3  | <ul style="list-style-type: none"> <li>range of textile items</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>Survey of retail outlets</li> </ul>   | <ul style="list-style-type: none"> <li>Retailer/textile technologist/manufacturer/designer</li> </ul>  |
| 4  | <ul style="list-style-type: none"> <li>current range of textile items incorporating recycled materials</li> </ul>      | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> </ul>   | <ul style="list-style-type: none"> <li>Retailer/designer</li> </ul>  |
| 5  | <ul style="list-style-type: none"> <li>ways of incorporating recycled materials/components to textile items</li> </ul> | <ul style="list-style-type: none"> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/designer/manufacturer</li> </ul>   |
| 6  | <ul style="list-style-type: none"> <li>possible inspiration from fashion trends</li> </ul>                             | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>Survey of retail outlets</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer/designer</li> </ul>  |
| 7  | <ul style="list-style-type: none"> <li>possible target market</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer</li> </ul>   |
| 8  | <ul style="list-style-type: none"> <li>range of trimmings/fastenings available</li> </ul>                              | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> <li>Interview</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer/designer</li> </ul>  |
| 9  | <ul style="list-style-type: none"> <li>ideas for potential solutions</li> </ul>  | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> <li>Sensory testing/survey/interview</li> <li>Manufacture of prototype (s) and check</li> <li>Interview</li> </ul> | <ul style="list-style-type: none"> <li>Target market</li> <li>With expert</li> <li>Textile technologist/manufacturer/retailer/designer/target group</li> </ul> |
| 10   | <ul style="list-style-type: none"> <li>choice of fabrics for potential solutions</li> </ul>                            | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Sensory testing/survey/interview</li> <li>Interview</li> <li>Manufacture of prototype(s) and check</li> </ul>                                    | <ul style="list-style-type: none"> <li>Target group</li> <li>Textile technologist/manufacturer/retailer/designer</li> <li>With expert</li> </ul>               |
| 11   | <ul style="list-style-type: none"> <li>suitability for the target group/end use</li> </ul>                             | <ul style="list-style-type: none"> <li>Interview</li> <li>Interview/questionnaire/survey/sensory testing</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer/designer</li> <li>With target group</li> </ul>                               |
| 12   | <ul style="list-style-type: none"> <li>price range of similar products/potential solutions</li> </ul>                  | <ul style="list-style-type: none"> <li>Interview</li> <li>Survey of current product range</li> </ul>  | <ul style="list-style-type: none"> <li>Target group/textile technologist</li> </ul>  |
| 13   | <ul style="list-style-type: none"> <li>cost of potential components/solutions</li> </ul>                               | <ul style="list-style-type: none"> <li>Costing exercise</li> <li>Survey of retail outlets</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/appropriate expert</li> </ul>  |
| 14   | <ul style="list-style-type: none"> <li>cost effective/good value for money</li> </ul>                                  | <ul style="list-style-type: none"> <li>Costing exercise and interview</li> <li>Survey of retail outlets and interview</li> </ul>  | <ul style="list-style-type: none"> <li>Retailer/textile technologist</li> <li>Retailer/textile technologist</li> </ul>   |

| Investigation – to establish/find out/investigate |  | Technique:   | Specified expert:  |
|---|--|--|--|
| 15  | <ul style="list-style-type: none"> <li>budget of target group/amount target group is prepared to pay</li> </ul>                    | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> </ul>  | <ul style="list-style-type: none"> <li>Target group/textile technologist</li> </ul>  |
| 16  | <ul style="list-style-type: none"> <li>range of recycled materials/components available</li> </ul>                                 | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer</li> </ul>  |
| 17  | <ul style="list-style-type: none"> <li>likes and dislikes of target group</li> </ul>   | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> <li>Sensory testing</li> </ul>   | <ul style="list-style-type: none"> <li>Target group/retailer/textile technologist</li> <li>Target group</li> </ul>             |
| 18  | <ul style="list-style-type: none"> <li>aesthetic appeal of potential solutions</li> </ul>  | <ul style="list-style-type: none"> <li>Sensory testing/interview/questionnaire</li> </ul>  | <ul style="list-style-type: none"> <li>Target group/retailer/textile technologist/designer</li> </ul>                          |
| 19  | <ul style="list-style-type: none"> <li>time/facilities/resources available to the candidate</li> </ul>                             | <ul style="list-style-type: none"> <li>Timed trial of prototype &amp; check</li> <li>Interview</li> <li>Resource/equipment checklist</li> </ul>            | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Textile technologist</li> </ul>                           |
| 20  | <ul style="list-style-type: none"> <li>skills necessary for manufacturing of the potential solution by the candidate</li> </ul>    | <ul style="list-style-type: none"> <li>Interview</li> <li>Skills audit &amp; check</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer</li> <li>Textile technologist/manufacturer</li> </ul> |
| 21  | <ul style="list-style-type: none"> <li>time/facilities/resources available to the manufacturer</li> </ul>                          | <ul style="list-style-type: none"> <li>Timed trial of prototype &amp; check</li> <li>Interview</li> <li>Resource/equipment checklist</li> </ul>            | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer</li> <li>Textile technologist/manufacturer</li> </ul> |
| 22  | <ul style="list-style-type: none"> <li>skills necessary for manufacturing of the potential solution by the manufacturer</li> </ul> | <ul style="list-style-type: none"> <li>Interview</li> <li>Skills audit &amp; check</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer</li> <li>Textile technologist/manufacturer</li> </ul> |
| 23  | <ul style="list-style-type: none"> <li>hygiene/safety requirements for production</li> </ul>                                       | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/authorised officer</li> </ul>                                      |
| 24  | <ul style="list-style-type: none"> <li>quality requirements of potential solutions</li> </ul>                                      | <ul style="list-style-type: none"> <li>Interview</li> <li>Manufacture prototype(s) &amp; trial</li> <li>Sensory testing/questionnaire/interview</li> </ul> | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Target group/textile technologist</li> </ul>              |
| 25  | <ul style="list-style-type: none"> <li>suitability for mass production</li> </ul>  | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer/designer</li> </ul>                                   |
| 26  | <ul style="list-style-type: none"> <li>influencing factors on final product</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> <li>Interview/questionnaire</li> </ul>   | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Target group</li> </ul>                                   |
| 27  | <ul style="list-style-type: none"> <li>durability of potential solutions</li> </ul>  | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>User/wearer trial</li> </ul>                                   | <ul style="list-style-type: none"> <li>Trading Standards Officer</li> </ul>  |
| 28  | <ul style="list-style-type: none"> <li>Safety in use/wear</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> </ul>  | <ul style="list-style-type: none"> <li>Trading Standards Officer/textile technologist</li> </ul>                               |
| 29  | <ul style="list-style-type: none"> <li>care requirement of materials/resources used</li> </ul>                                     | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>Trial of prototype(s)</li> </ul>                               | <ul style="list-style-type: none"> <li>Textile technologist</li> </ul>   |

**Note:**

- The candidate **must** specify the term 'expert' if used
- A textile technologist could include a person working in textile product development or a Home Economics teacher
- Retailer outlet must be relevant to investigation and be specified

| <b>Step 1.3</b>  |   |  |  |
|--|---|--|--|
| <b>Brief 2 – Party range for teenagers</b>               |   |  |  |
| <b>Investigation – to establish/find out/investigate</b> |   | <b>Technique:</b>  | <b>Specified expert:</b>   |
| 1  | <ul style="list-style-type: none"> <li>potential range of party items</li> </ul>                                  | <ul style="list-style-type: none"> <li>Interview</li> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer/designer</li> </ul>  |
| 2  | <ul style="list-style-type: none"> <li>types of celebrations</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer</li> </ul>  |
| 3  | <ul style="list-style-type: none"> <li>current party ranges for teenagers</li> </ul>                              | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>Survey of retail outlets</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer</li> </ul>   |
| 4  | <ul style="list-style-type: none"> <li>suitable textile/fabrics available</li> </ul>                              | <ul style="list-style-type: none"> <li>Literary/Internet search</li> <li>Survey of retail outlets</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist</li> </ul>   |
| 5  | <ul style="list-style-type: none"> <li>suitability of potential solutions/items for teenagers/party</li> </ul>    | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer/designer/teenagers</li> </ul>   |
| 6  | <ul style="list-style-type: none"> <li>range of trimmings/fastenings available</li> </ul>                         | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/retailer/manufacturer/designer</li> </ul>  |
| 7  | <ul style="list-style-type: none"> <li>range of retail outlets offering suitable trimmings/fastenings</li> </ul>  | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> </ul>   |  |
| 8  | <ul style="list-style-type: none"> <li>ideas for potential solutions/potential solutions on the market</li> </ul> | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> <li>Sensory testing/survey/interview</li> <li>Interview</li> <li>Manufacture of prototype(s) &amp; check</li> </ul> | <ul style="list-style-type: none"> <li>Teenagers/parents/carers</li> <li>Textile technologist/manufacture/retailer/designer</li> <li>Textile technologist/manufacture/retailer/designer</li> </ul>                                 |
| 9  | <ul style="list-style-type: none"> <li>choice of fabrics/decorations/trimmings for potential solutions</li> </ul> | <ul style="list-style-type: none"> <li>Survey of retail outlets</li> <li>Sensory testing/survey/interview</li> <li>Interview</li> <li>Manufacture of prototype(s) &amp; check</li> </ul>                                   | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer/retailer/teenagers</li> <li>Textile technologist/manufacturer/retailer/teenagers</li> <li>Textile technologist/manufacturer/retailer/teenagers</li> </ul> |
| 10   | <ul style="list-style-type: none"> <li>price range of similar textile products</li> </ul>                         | <ul style="list-style-type: none"> <li>Interview</li> <li>Survey of current product range</li> </ul>   | <ul style="list-style-type: none"> <li>Teenagers/parents/carers/textile technologist</li> </ul>  |
| 11   | <ul style="list-style-type: none"> <li>cost of potential components/solutions</li> </ul>                          | <ul style="list-style-type: none"> <li>Costing exercise</li> <li>Survey of retail outlets</li> </ul>   |  |
| 12   | <ul style="list-style-type: none"> <li>budget of teenagers/amount teenagers are prepared to pay</li> </ul>        | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> </ul>  | <ul style="list-style-type: none"> <li>Teenagers/parents/carers/textile technologist</li> </ul>  |
| 13   | <ul style="list-style-type: none"> <li>aesthetic appeal of potential solutions</li> </ul>                         | <ul style="list-style-type: none"> <li>Sensory testing/interview/questionnaire</li> </ul>  | <ul style="list-style-type: none"> <li>Teenagers/parents/carers/textile technologist/retailer/designer</li> </ul>  |
| 14   | <ul style="list-style-type: none"> <li>likes and dislikes of teenagers</li> </ul>                                 | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> </ul>  | <ul style="list-style-type: none"> <li>Teenagers/parents/carers/designer/retailer</li> </ul>   |
| 15   | <ul style="list-style-type: none"> <li>current trends/fashion</li> </ul>  | <ul style="list-style-type: none"> <li>Interview/questionnaire</li> <li>Survey of retail outlets</li> <li>Literary/Internet search</li> <li>Moodboard</li> </ul>   | <ul style="list-style-type: none"> <li>Teenagers/parents/carers/textile technologist</li> </ul>  |

| Investigation – to establish/find out/investigate |  | Technique:   | Specified expert:   |
|---|--|--|---|
| 16  | <ul style="list-style-type: none"> <li>time/facilities/resources available to the candidate</li> </ul>                             | <ul style="list-style-type: none"> <li>Interview</li> <li>Timed trial of prototype &amp; check</li> <li>Resources/equipment checklist</li> </ul>           | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Textile technologist</li> </ul>                                    |
| 17  | <ul style="list-style-type: none"> <li>skills necessary for manufacturing the potential solution by the candidate</li> </ul>       | <ul style="list-style-type: none"> <li>Interview</li> <li>Skills audit &amp; check</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Textile technologist</li> </ul>                                    |
| 18  | <ul style="list-style-type: none"> <li>time/facilities/resources available to the manufacturer</li> </ul>                          | <ul style="list-style-type: none"> <li>Interview</li> <li>Timed trial of prototype &amp; check</li> <li>Resource/equipment checklist</li> </ul>            | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer</li> <li>Textile technologist/manufacturer</li> </ul>          |
| 19  | <ul style="list-style-type: none"> <li>skills necessary for manufacturing of the potential solution by the manufacturer</li> </ul> | <ul style="list-style-type: none"> <li>Interview</li> <li>Skills audit &amp; check</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/manufacturer</li> <li>Textile technologist/manufacturer</li> </ul>          |
| 20  | <ul style="list-style-type: none"> <li>hygiene/safety requirements for potential solution</li> </ul>                               | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist/Trading Standards Officer</li> </ul>  |
| 21  | <ul style="list-style-type: none"> <li>quality requirements of potential solutions</li> </ul>                                      | <ul style="list-style-type: none"> <li>Interview</li> <li>Manufacture prototype(s) &amp; trial</li> <li>Sensory testing/questionnaire/interview</li> </ul> | <ul style="list-style-type: none"> <li>Textile technologist</li> <li>Teenagers/parents/carers</li> <li>Fashion store manager</li> </ul> |
| 22  | <ul style="list-style-type: none"> <li>suitability for mass production</li> </ul>  | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist</li> </ul>  |
| 23  | <ul style="list-style-type: none"> <li>influencing factors on final product</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> </ul>  | <ul style="list-style-type: none"> <li>Textile technologist</li> </ul>  |
| 24  | <ul style="list-style-type: none"> <li>durability of potential solutions</li> </ul>  | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>User/wearer trial</li> </ul>                                   | <ul style="list-style-type: none"> <li>Trading Standards Officer</li> </ul>   |
| 25  | <ul style="list-style-type: none"> <li>safety in use/wear</li> </ul>   | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> </ul>  | <ul style="list-style-type: none"> <li>Trading Standards Officer/textile technologist</li> <li>Health and Safety officer</li> </ul>     |
| 26  | <ul style="list-style-type: none"> <li>care requirements of materials/resources used</li> </ul>                                    | <ul style="list-style-type: none"> <li>Interview</li> <li>Literary/Internet search</li> <li>Trial of prototype(s)</li> </ul>                               | <ul style="list-style-type: none"> <li>Textile technologist</li> </ul>  |

**Note:**

- The candidate **must** specify the term 'expert' if used
- A textile technologist could include a person working in textile product development or a Home Economics teacher
- Retailer outlet must be relevant to investigation and be specified

**STEP 2 (Investigating) Total mark allocation**

**15 marks**

**2 : 1 Implement the overall plan for investigations – 12 marks available**

The mark allocation for this area will be based on candidates' performance in a series of investigations.

Candidates will be assessed on the results and conclusions from each investigation – see the marking criteria breakdown listed on the next page.

**Teachers/lecturers must ensure candidates present the results and conclusions of each investigation on pages 9 – 11 of the pro forma only.**

Candidates using computer software to produce results eg bar charts or graphs must ensure that these are presented only on the pages allocated for this work ie pages 9 – 11 of the proforma.

Candidates who present the results and conclusions of each investigation on more than one A4 sheet of paper will be penalised.

**See Appendix 1 for guidance on carrying out investigations/tests.**



## Implement the overall plan for investigations

- Results must be brief, concise and easy to interpret
- Results must show a clear link to the aim/purpose of the investigation
- Results must be derived from the investigations and based on facts and evidence
- Conclusions must be based on the results obtained

|  |         |
|--|---------|
| All investigations candidates have fulfilled the aims on page 8 of the pro forma         | 3 marks |
| ½ or more investigations candidates have fulfilled the aims on page 8 of the pro forma   | 2 marks |
| Less than ½ investigations candidates have fulfilled the aims on page 8 of the pro forma | 1 mark  |
| In no investigations candidates fulfilled the aims on page 8 of the pro forma            | 0 marks |

|  |         |
|--|---------|
| All investigations contain brief/concise/easy to interpret results         | 3 marks |
| ½ or more investigations contain brief/concise/easy to interpret results   | 2 marks |
| Less than ½ investigations contain brief/concise/easy to interpret results | 1 mark  |
| No investigations contain brief/concise/easy to interpret results          | 0 marks |

|  |         |
|--|---------|
| All results are based on fact/valid evidence/relevant to design brief                | 3 marks |
| ½ or more of the results are based on fact/valid evidence/relevant to design brief   | 2 marks |
| Less than ½ of the results are based on fact/valid evidence/relevant to design brief | 1 mark  |
| No results are based on fact/valid evidence/relevant to design brief                 | 0 marks |

|  |         |
|--|---------|
| All conclusions are based on the results of investigations and/or show progression         | 3 marks |
| ½ or more conclusions are based on the results of investigations and/or show progression   | 2 marks |
| Less than ½ conclusions are based on the results of investigations and/or show progression | 1 mark  |
| No conclusions are based on results of investigations and/or does not show progression     | 0 marks |

**2 : 2 Derive a solution from the investigations – 3 marks available**

**Generate one solution – 2 marks (ie ONE item) NB it is extremely important that centres strictly adhere to this rule. No marks will be allocated for STEP 3 or STEP 4 if candidates generate more than one solution.**

Candidates derive **one solution** which must

|   |        |
|---|--------|
| Be relevant to the needs of the project brief                         | 1 mark |
| Be based on the results and conclusions reached in the investigations | 1 mark |
| Describes the solution in detail                                      | 1 mark |

The solution should be described in detail so it is able to be **visualised**.

Various methods may be used eg– written details, recipes, sketches, diagrams, labelled diagrams, storyboards – to ensure clarity.

**Brief 1: Recycled materials  
Possible solutions**

Any **textile item** incorporating recycled materials.

**Brief 2: Party range for teenagers  
Possible solutions**

Any **textile item** suitable for a party range for teenagers.

**NB Stop marking if more than one solution is given and refer technological project to the Principal Assessor.**

**STEP 3 (Manufacturing and Testing) Total mark allocation****21 marks****3 : 1 Manufacture the chosen solution – 10 marks available****Candidate completes the planned sequence of work****5 marks**

Candidates must complete the plan **before** starting to manufacture the solution.

Candidates will be penalised if the plan is written **retrospectively**.

|   |         |
|---|---------|
| Candidates who draw up a sequence of work which <b>consistently</b> demonstrates effective deployment of time | 5 marks |
| Candidates who draw up a sequence of work with <b>minor</b> lapses in the deployment of time                  | 4 marks |
| Candidates who draw up a sequence of work with <b>occasional</b> lapses in the deployment of time             | 3 marks |
| Candidates who draw up a sequence of work with <b>regular</b> lapses in the deployment of time                | 2 marks |
| Candidates who draw up a sequence of work with <b>frequent</b> lapses in the deployment of time               | 1 mark  |
| Candidate who submits a retrospective sequence of work  | 0 marks |

Candidates may choose to present their sequence of work in an appropriate form eg table, chart, written details, flow chart. An indication of dates, times and details of the proposed work to be undertaken must demonstrate effective use of time by the candidate.

The sequence of work must show logical progression and allow the solution to be manufactured

Candidates' work must be completed on page 13 of the pro forma.

**Candidate identifies and requisitions equipment and resources****3 marks**

|  |         |
|--|---------|
| Candidates who identify and requisition all resources and equipment  | 3 marks |
| Candidates who identify and requisition most resources and equipment | 2 marks |
| Candidates who omit any <b>obvious</b> resources and/or equipment    | 1 mark  |

Resources will depend on the chosen solution and may relate to textiles, equipment.

Note: all resources and equipment required for manufacture must be listed and take into account

- exact types and colours of textiles and trimmings including sizes/dimensions in metric measurements.

**Candidate consistently justifies effective deployment of equipment and resources**

**2 marks**

Justification should relate to all the identified equipment and resources to gain full marks.

**After** completing the **plan** for manufacture, candidates should start to manufacture the solution.

Candidates should be encouraged to make notes on page 15 as they are carrying out the manufacturing process. Notes may be made on how manufacture is proceeding, any problems encountered and any changes/modifications made to the plan.

**Photographic evidence of the candidates' work must be attached to page 16 of the proforma.**

**Two photographs are required:**

- one should provide evidence of the solution **during manufacture**.
- the other should provide evidence of the **completed** solution.

Although the quality of the photographs is not important, they **must** give an indication of the type of work being carried out and completed by the candidate.

Although no marks are awarded here, **photographic evidence must be provided** of the candidates' solution.

**If photographic evidence is not provided, no further marking of the Technological Project will be carried out as no evidence has been provided on which to base the marking of the next stages of work.**

**Please note:**

Page 16 of the electronic version of the pro forma has been set up to allow the electronic insertion of digital photographs.

**3 : 2      Devise two tests for the manufactured solution – 3 marks available**

**Candidate presents two tests** **1 mark**

Candidates should present **two** appropriate tests – failure to do this will result in no marks being awarded.

**Candidate identifies techniques to be used** **1 mark**

**Two different techniques** should be identified.

Techniques must be **appropriate** to the tests, allowing candidates to collect relevant data/information.

**Candidate justifies the two tests** **1 mark**

Justifications should be

- clear and well thought out
- linked to the test.

**NB Candidates are expected to include any literary titles/authors, web addresses and the title of any person/expert interviewed. Candidates are expected to identify the target group which is used during testing.**

**Briefs 1 & 2**

| <b>Test</b>   | <b>Technique</b>   | <b>Justification</b>  |
|---|--|---|
| 1. Examination by a specified expert eg manufacturer/retailer/textile technologist/designer/ parent/carer | Interview/questionnaire with specified expert<br>Sensory test with specified expert  | <ul style="list-style-type: none"><li>• To check aesthetic qualities</li><li>• To check if item is marketable</li><li>• To check cost effectiveness/profitability of item</li></ul> |
| 2. Examination by target group i.e. teenagers   | Interview/questionnaire/with teenagers/parent/carer<br>Sensory testing with teenagers/parent/carer<br>Observational checklist<br>Wearer/user trial with teenagers/parent/carer | <ul style="list-style-type: none"><li>• To find out if item is acceptable/appropriate to teenagers</li><li>• To establish marketability</li></ul>                                   |
| 3. Costing exercise   | Costing exercise confirmed by interview with an expert, eg textile technologist/retailer   | <ul style="list-style-type: none"><li>• To establish whether item is cost effective to produce</li><li>• To establish a selling price for the finished item</li></ul>               |

**3 : 3 Implement the tests for the manufactured solution – 8 marks available (revised)**

**Implement the overall plan for investigations**

Marking Criteria

- Results must be brief, concise and easy to interpret
- Results must show a link to the aim/purpose of the test
- Results must be derived from the tests and based on facts and evidence
- Conclusions must be based on results obtained

|   |         |
|---|---------|
| For both tests – candidates have done as they intended from page 15 | 2 marks |
| For 1 test – candidates have done as they intended from page 15     | 1 mark  |
| No test – candidates have done as they intended from page 15        | 0 marks |

|   |         |
|---|---------|
| Both tests contain brief/concise/easy to interpret results. | 2 marks |
| One test contains brief/concise/easy to interpret results.  | 1 mark  |
| No test contains brief/concise/easy to interpret results.   | 0 marks |

|  |         |
|--|---------|
| All results of tests are based on fact/valid evidence/relevant to specification points/design brief. | 2 marks |
| One result of tests is based on fact/valid evidence/relevant to specification points/design brief.   | 1 mark  |
| No results of tests are based on fact/valid evidence/relevant to specification points/design brief.  | 0 marks |

|   |         |
|---|---------|
| Conclusions for two tests are based on the results of tests and/or show progression   | 2 marks |
| Conclusions for one test are based on the results of tests and/or show progression    | 1 mark  |
| No conclusions for the tests are based on results of tests and/or show no progression | 0 marks |

**STEP 4 Total mark allocation****12 marks****4 : 1 Evaluate the chosen solution – 6 marks available****Candidate provides accurate evaluation some of which is detailed against the specification****5 marks**

Candidates must rewrite (or copy and paste) the specification points in the appropriate column. Candidates must evaluate the solution against each specification point. Candidates should use the results of the investigations, manufacture and/or testing where appropriate.

|   |         |
|---|---------|
| Candidates who evaluate <b>all or five</b> specification points | 5 marks |
| Candidates who evaluate <b>four</b> specification points        | 4 marks |
| Candidates who evaluate <b>three</b> specification points       | 3 marks |
| Candidates who evaluate <b>two</b> specification points         | 2 marks |
| Candidates who evaluate <b>one</b> specification point          | 1 mark  |

**Candidate provides detailed accurate evaluation against specification****1 mark**

If further detail is provided within the evaluations then an additional mark will be awarded.

Extra detail means that one additional point of evaluation is provided for **any one** of the specification points.

#### 4 : 2 Evaluate the Technological Project – 6 marks available

##### Candidates evaluate the Technological Project: Step 1 Analysing, Step 2 Investigating and Step 3 Manufacturing and Testing

All of the following criteria must be used in the evaluation

- time
- resources
- skills and abilities.

**Marks will not be awarded to candidates who do not use these criteria in their evaluation.**

The evaluation, which may include adaptations/modifications, **must be based on evidence** which can be found within the candidates' Technological Project pro forma eg from investigations, manufacture and/or testing.

In the evaluation the candidates should give an opinion based on facts from their Technological Project and then explain the consequences for the final solution.

Candidates should provide **two** points of evaluation for **each** step of the Technological Project.

One mark should be awarded for each point of evaluation. A minimum of one mark must come from each step evaluated.

|        |                           |         |
|--------|---------------------------|---------|
| Step 1 | Analysing                 | 2 marks |
| Step 2 | Investigating             | 2 marks |
| Step 3 | Manufacturing and Testing | 2 marks |

Pages 23 to 24 of the pro forma should be used for the evaluation.



**Appendix 1  
Higher Technological Project  
Guidance on Carrying out Investigations/Tests**

**Three investigations and two tests must be carried out.**

**The aim, which should be linked to the candidates' specification, should be rewritten or cut and pasted from page 8 of the pro forma onto the top of the investigation page.**

**Questionnaire**

- Minimum of 20 respondents.
- Minimum 5/8 relevant/valid questions linked to aim/specification to allow relevant data to be collected.
- Questions and all possible answers must be displayed.
- All responses must be displayed including nil responses.
- Given constraints of space, it is not necessary to display results as pie charts/graphs.
- Table format for displaying results of questionnaires can be space saving.

**Survey**

- Must identify the source(s) of information.
- Source of information must be relevant to investigation.
- The following sources could be used including the Internet, literary, shop, restaurant/café as a source of information.
- The source of information should be identified.
- The place selected should be related to the quality and quantity of the data available rather than the number of sources however more than one source should be used.
- Information should be displayed using appropriate headings, sub-divisions etc.

**Interviews**

- Carefully consider the suitability of the person interviewed. Must clearly identify their position in establishment/job title.
- Minimum 5/8 relevant questions linked to aim/specification to allow relevant data to be collected.
- Open-ended questions should be used to allow more data to be collected from the interviewee.
- Questions should be carefully formatted to extract useful facts and avoid one word responses such as Yes/No.
- All questions and responses must be displayed.

**Internet/Literary search**

- All sources must be clearly identified. A minimum of 3 internet/literary sources.
- Should be related to the quality/quantity/relevance of the data available rather than the number of sources.
- Graphics may be included where relevant.
- Data collected should be organised using appropriate headings/sub-divisions etc.
- Information should not be lifted 'en bloc' from websites. It is appropriate to summarise key points which are relevant to the aim/specification.

## **Costing**

- Breakdown cost of all ingredients/components must be included.
- Details of quantities and unit costs must be included.
- Sources should be included where appropriate.
- Comparative costing should measure 'like for like'.

NB Costing only proves cost of items/components. On its own it does not provide low/high cost, value for money, acceptability of price to target group.

## **Nutritional Analysis**

- Sources must be shown.
- All nutrients relevant to the aim should be shown.
- Nutritional analysis of all ingredients must be included. (A 'total' for a dish is not acceptable).
- Sufficient data must be accessed in order to draw relevant conclusions.
- When used as a test the suitability of the results should be assessed by a suitable expert eg community dietician, food technologist etc.

## **Fabric Analysis**

- There is no need to repeat fabric tests where information is already easily available in textbooks/websites.
- Fabrics used for testing must be clearly identified ie construction/fibre composition.
- Only fabrics being considered for potential solution should be tested/sampled/ investigated towards final solution.
- Details of method testing must be given.

## **Sensory Testing**

- All potential solutions must be clearly described.
- Breakdown of results must be shown. Summary of results is not acceptable.
- Key must be provided.
- It is appropriate to ask questions to elicit potential improvements/modifications.
- It is suggested for sensory testing that a minimum of five people are used to assess the products.

## Technological Project Higher

### Summary Mark Allocation

**Total 70 marks available**

| Step   | Mark Breakdown  | Allocation  |
|--|---|---|
| <b>1 . 1</b>                                       | <b>Identification of the key points with explanation</b><br>Identify the key points<br>Additional key points<br>Key points plus basic and accurate explanation<br>Key points plus detailed and accurate explanation   | 2 marks<br>1 mark<br>2 marks<br>1 mark<br><b>Total mark allocation 6</b>                        |
| <b>1 . 2</b>                                       | <b>Draw up appropriate criteria for a specification</b><br>Allow for a range of possible solutions<br>Contain more detail than the brief<br>Be written in <b>measurable/able to be tested</b> terms<br>Link each specification point to the key points<br>Provide basic explanations<br>Provide detailed explanations | 1 mark<br>2 marks<br>2 marks<br>2 marks<br>2 marks<br>1 mark<br><b>Total mark allocation 10</b> |
| <b>1 . 3</b>                                       | <b>Devise an overall plan for investigations</b><br>Present a list of investigations<br>Identify techniques to be used<br>Justify the need for the investigations   | 2 marks<br>2 marks<br>2 marks<br><b>Total mark allocation 6</b>                                 |
| <b>Total mark allocation for Step 1 — 22 marks</b> |   |   |
| <b>2 . 1</b>                                       | <b>Implement the overall plan for investigations</b><br>Aims fulfilled<br>Brief, concise, easy to interpret<br>Relevant and valid results<br>Conclusions  | 3 marks<br>3 marks<br>3 marks<br>3 marks<br><b>Total mark allocation 12</b>                     |
| <b>2 . 2</b>                                       | <b>Derive a solution from the investigations</b><br>Generate one solution – based on evidence<br>Relevant to brief<br>Describe the solution in detail   | 1 mark<br>1 mark<br>1 mark<br><b>Total mark allocation 3</b>                                    |
| <b>Total mark allocation for Step 2 — 15 marks</b> |   |   |

| <b>Step</b>  | <b>Mark Breakdown</b>  | <b>Allocation</b>  |
|--|--|--|
| <b>3 . 1</b>                                       | <b>Manufacture the chosen solution</b><br><br>Step by step sequence of work showing effective deployment of time<br>Requisition of resources<br>Justification of resources/equipment   | <b>5 marks</b><br><b>3 marks</b><br><b>2 marks</b><br><b>Total mark allocation 10</b>                  |
| <b>3 . 2</b>                                       | <b>Devise two tests for the manufactured solution</b><br><br>Present two tests<br>Identify techniques to be used<br>Justify the two tests  | <b>1 mark</b><br><b>1 mark</b><br><b>1 mark</b><br><b>Total mark allocation 3</b>                      |
| <b>3 . 3</b>                                       | <b>Implement the tests for manufactured solution</b><br><br>Aims fulfilled<br>Brief, concise and easy to interpret<br>Relevant and valid reasons<br>Conclusions  | <b>2 marks</b><br><b>2 marks</b><br><b>2 marks</b><br><b>2 marks</b><br><b>Total mark allocation 8</b> |
| <b>Total mark allocation for Step 3 — 21 marks</b> |  |  |
| <b>4 . 1</b>                                       | <b>Evaluate the chosen solution</b><br><br>Accurate explanation some of which is detailed against <b>each</b> specification point (to include results of investigations and/or tests where appropriate)<br><br>Valid evaluations<br>Provide detailed accurate explanation                          | <b>5 marks</b><br><b>1 mark</b><br><b>Total mark allocation 6</b>                                      |
| <b>4 . 2</b>                                       | <b>Evaluate the Technological Project</b><br><br>Candidate can evaluate Steps 1-3 of the Technological Project with detailed reference to the following criteria:<br><br>Time<br>Resources<br>Skills/abilities<br><br>Step 1 Analysing<br>Step 2 Investigating<br>Step 3 Manufacturing and Testing | <b>2 marks</b><br><b>2 marks</b><br><b>2 marks</b><br><b>Total mark allocation 6</b>                   |
| <b>Total mark allocation for Step 4 — 12 marks</b> |  |  |

[END OF MARKING INSTRUCTIONS]