GCSE Fibres and Fabrics Quiz Answers

1  Put a circle round the odd one out in each of the following groups. Explain why it is the odd one out.

   Group 1:  Nylon  Silk  Lycra  Polyester
            It is a natural fibre, the others are man-made fibres.

   Group 2:  Brushed  Crease resistant  Warp  Heat-set
            It is a yarn used in weaving, the others are fabric finishes.

   Group 3:  Woven  Bonded  Knitted  Staple
            It is a short fibre, the others are ways of making a fabric.

2  Are the following statements true or false? Give a reason for your decision.

   A  Wool fibres come from a plant.
       False. Wool comes from an animal such as a sheep.

   B  Cotton and linen are not as absorbent as polyester.
       False. Polyester is not at all absorbent but cotton and linen are very absorbent.

   C  Yarns are made by twisting fibres together.
       True. Twisting gives strength to the yarn and holds the fibres together.

   D  Knitted fabrics are made by looping yarns together.
       True. The loops of yarn give knitted fabrics their stretch qualities.

   E  Satin weaves make very strong fabrics.
       False. Because of their loose structure, satin fabrics snag easily.
3 What does each of these symbols mean?

- [Image] Wash by hand.
- [Image] Do not use chlorine bleach.
- [Image] Iron on medium heat
- [Image] Wash at maximum 40° with much reduced agitation

4 Place the name of each method of fabric construction in the correct box.

Name of fabric construction:
weft knit    plain weave    twill weave    bonded    warp knit

<table>
<thead>
<tr>
<th>Diagram of fabric construction</th>
<th>Name of fabric construction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plain weave</td>
</tr>
<tr>
<td></td>
<td>Twill weave</td>
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<tr>
<td></td>
<td>Weft knit</td>
</tr>
<tr>
<td></td>
<td>Warp knit</td>
</tr>
<tr>
<td></td>
<td>Bonded</td>
</tr>
</tbody>
</table>
5. Give three different reasons for blending fibres to make a fabric. 
   Any of the following:
   - To help reduce the cost of the fabric
   - To give different effects in the texture and handle of the fabric
   - To make a fabric with specific qualities for a particular end use
   - To make the fabric stronger
   - To make a fabric easier to care for
   - To enable fabrics to be more crease resistant
   - To allow for heat-setting or special effects

6. Tick the box next to the correct description of a smart fabric

<table>
<thead>
<tr>
<th>Description</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>A smart fabric can go back to shape after being stretched.</td>
<td>✓</td>
</tr>
<tr>
<td>A smart fabric is able to react to changes in the environment without human intervention.</td>
<td>✓</td>
</tr>
<tr>
<td>A smart fabric is always clean and tidy.</td>
<td></td>
</tr>
</tbody>
</table>

7. Give three different ways in which the packaging of textile products can damage the environment. 
   Any of the following:
   - Use of paper and ink wastes resources
   - Transportation of paper and ink burns fossil fuels
   - Use of energy in manufacture of packaging
   - Disposal of unwanted packaging in landfill
   - Added weight of packaging when transporting textile products.

8. What is the name of the fastening shown in the photographs below?
   Velcro.....

9. What is Tencel?
   Is it:
   - a man-made fibre similar to nylon
   - a modern regenerated fibre
   - a fibre which has 10 different molecules
   - a special finish to make a fabric water-resistant.
10 Name the fibre shown below.

![Wool](image)

Wool

11 Why is air important in making fabrics warm to wear? Is it because:

- It acts as an insulator
- It stops rainwater getting through the fabric
- It makes fabrics soft and fluffy.

12 Give three different ways in which air can be trapped in a fabric. Any of the following:

- Use of hairy yarns
- Use of crimped or bulked fibres
- Brushing fabric surface
- Use of knitted construction

13 Read the following statements about wool.

A Wool dries quickly.
B Wool is attacked by moths.
C Wool is warm to wear.
D Wool creases easily.

Put a circle round the 2 statements which are true. Is it:

- A and B
- B and C
- B and D
- C and D.
14 Read the following statements about cotton.
A Cotton is very strong.
B Cotton is waterproof.
C Cotton creases easily.
D Cotton is warm to wear.

Put a circle round the 2 statements which are true.
Is it:
• A and B
• C and D
• A and C
• A and D.

15 What is the name of the decorative technique shown below?

........Tie dye........................

16 Viscose is often blended with polyester to make a fabric.
Tick the box next to the correct reasons for using viscose in a blend.

<table>
<thead>
<tr>
<th>Reason</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscose adds strength to the polyester/viscose blend.</td>
<td></td>
</tr>
<tr>
<td>Viscose makes the polyester/viscose blend more absorbent.</td>
<td>✓</td>
</tr>
<tr>
<td>Viscose makes the polyester/viscose blend crease-resistant.</td>
<td></td>
</tr>
<tr>
<td>Viscose reduces the cost of the polyester/viscose blend.</td>
<td>✓</td>
</tr>
</tbody>
</table>

17 What is a microfibre?
Is it:
• A fibre which has been made in a microwave oven
• A very fine fibre
• A very short fibre
18 Which of the following fibres can be used for microfibres?
Polyester   Linen   Polyamide   Wool

19 What is the difference between a staple fibre and a filament fibre?
A staple fibre is short, a filament fibre is long/continuous.

20 Underline the name of the fibre which is not a filament fibre.
Silk   Polyester   Viscose   Cotton

21 Underline the names of the fibres which are not staple fibres.
Wool   Polyamide   Cotton   Lycra   Linen

22 What is the name of the technique shown below?

Screen printing

23 Why should a polyester fabric not be ironed with a hot iron?
Is it because:
- It is a waste of electricity
- The polyester will melt
- The polyester will catch fire
- The polyester will lose its colour

24 The fabric shown below is decorated using batik.

What is batik?
Is it:
- A type of embroidery
- A type of appliqué
- A type of dyeing using wax resist
- A type of dyeing using string
25 What is the selvedge of the fabric? Is it:
   - The rough edge where the fabric has been cut
   - Fabric left over when products have been cut out
   - The profit made by the fabric manufacturer
   - The finished off edge of the fabric

26 Match each fastening with the right product.
   Fastening:
   - zip
   - buckle and strap
   - press studs
   - button and buttonhole

<table>
<thead>
<tr>
<th>Product</th>
<th>Fastening</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Jacket" /></td>
<td>Press studs</td>
</tr>
<tr>
<td><img src="image2.png" alt="Pants" /></td>
<td>Zip</td>
</tr>
<tr>
<td><img src="image3.png" alt="Shirt" /></td>
<td>Button and buttonhole</td>
</tr>
<tr>
<td><img src="image4.png" alt="Bag" /></td>
<td>Buckle and strap</td>
</tr>
</tbody>
</table>

27 Interfacing is often used in the manufacture of textile products.
   Tick the boxes next to the correct reasons for using interfacing.

<table>
<thead>
<tr>
<th>Reason for using interfacing</th>
<th>√</th>
</tr>
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<tbody>
<tr>
<td>It strengthens the fabric</td>
<td></td>
</tr>
<tr>
<td>It makes the fabric waterproof</td>
<td>√</td>
</tr>
<tr>
<td>It stops the fabric from stretching</td>
<td>√</td>
</tr>
<tr>
<td>It gives shape to the fabric</td>
<td>√</td>
</tr>
</tbody>
</table>
28 The diagram below shows a pattern made using appliqué.

How is appliqué done?

Put a tick next to the correct answer.

- One layer of fabric is stitched on top of another
- The pattern is painted on with fabric paint
- The pattern is woven into the fabric
- One layer of fabric is glued down on top of another.

29 Which is the correct order when making fabrics?

Put a tick next to the correct answer.

<table>
<thead>
<tr>
<th>Yarns</th>
<th>Fabrics</th>
<th>Fibres</th>
</tr>
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<tr>
<td>Fibres</td>
<td>Fabrics</td>
<td>Yarns</td>
</tr>
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</table>

30 A manufacturer has the following specification for outdoor tops.

The fabric must be:

1. lightweight
2. warm to wear
3. easy to wash
4. hardwearing

Underline the name of the best fabric from the list below.

- Cotton denim
- Wool twill weave fabric
- Cotton corduroy
- Polyester fleece