

Textiles and Fabrics: Design and Technology Mastery

Learning objective: To understand the properties, origins, and structural techniques used in textile design, including joining methods and functional design requirements.

Review these flashcards to master the terminology and concepts required for Year 5 Textiles. Use them to test your knowledge of fabric properties and construction techniques.

What is the difference between a natural fibre and a synthetic fibre?

A natural fibre is harvested from plants (like cotton) or animals (like wool), whereas a synthetic fibre is man-made, usually from chemical processes (like polyester).

In weaving, what is the difference between the warp and the weft?

The warp threads are held stationary on the loom, while the weft threads are passed over and under the warp to create the fabric.

What is the primary purpose of a 'seam allowance' when joining two pieces of fabric?

A seam allowance is the area between the edge of the fabric and the line of stitching; it prevents the fabric from fraying and ensures the seam is strong.

Explain the textile technique known as 'appliqué'.

Appliqué is a decorative technique where smaller pieces of fabric are layered and stitched onto a larger base fabric to create a design or picture.

Why might a designer choose a felt fabric over a woven fabric for a specific project?

Felt is non-woven, meaning it does not fray when cut, making it ideal for shapes or edges that do not require hemming.

Define 'fastening' in the context of textile design and provide two examples.

A fastening is a mechanism used to hold fabric edges together or keep a garment closed. Examples include buttons, zips, Velcro, or press studs.

What is the importance of a 'template' when designing a textile product?

A template ensures accuracy, consistency, and minimal waste of materials by providing a precise guide for cutting fabric shapes.

Justify why 'durability' is a crucial factor when selecting fabric for a school bag.

A school bag must withstand daily friction, heavy loads, and repeated opening/closing; therefore, a durable fabric like canvas is chosen to prevent tearing and extend the product's lifespan.

Compare and contrast a running stitch and a blanket stitch.

A running stitch is a simple, straight stitch used for basic seams, whereas a blanket stitch is a looping stitch used to reinforce the edge of thick fabrics or for decorative finishing.

What might happen to a textile product if the chosen thread is significantly weaker than the fabric?

The thread may snap under tension or when the fabric is stretched, causing the seams to burst and the product to fail.