

Staple and continuous filament yarns

- Staple fibres are short fibres.
- All natural fibres are staple fibres, except silk.
- Filament fibres form long continuous lengths.
- Filament fibres are manufactured or synthetic fibres.
- Silk is a continuous filament fibre.

Blended and mixed fibres

- Fibres are *blended* together during spinning to combine the best properties of both fibres.
- The suitability of fabrics made from blended yarns is increased to include a wider range of uses.
- Most modern fabrics include fibre blends.
- A *mixture* refers to fabrics where yarns of different types are used in the fabric construction, for example cotton warp yarns and polyester weft yarns.
- Popular blends and mixes include: polyester and cotton; silk and viscose, wool and acrylic, hemp and cotton.

Reasons for blends and mixes include:

- ◆ reducing the cost of the fabric
- ◆ improving aesthetics, for example a better appearance – colour, texture, tone
- ◆ improving functionality – better handle or draping qualities; wider range of uses
- ◆ making fabrics easier to care for.

Yarns

- Yarns are created by spinning (twisting) staple or filament fibres together.
- Filament yarns, made from filament fibres, are smooth and are therefore not good insulators.
- Staple yarns, made from staple fibres, are hairy which means they are good at trapping air making them good insulators.
- The number of twists in a yarn affects its strength – tighter/more twists leads to a stronger yarn.

Fancy and novelty yarns

- Fancy yarns can be made from staple or filament fibres, or combinations of these.
- Fancy yarns add interesting textures to fabrics.



This woven fabric is made from fancy yarns of varying textures, thicknesses and colours creating a more interesting effect.

- *Bouclé* is a fancy yarn and is also the name of the resultant fabric.
- *Bouclé* comes from the French word for curly. This is a good description of this yarn.
- A *slub* yarn has varying thickness along its length.
- This is created during the spinning process and adds texture to a fabric.
- *Chenille* yarn is soft and fluffy with fibres sticking out from a central core.
- Fabrics made from *chenille* are very soft and warm to wear.

Bonded Fabrics

- Bonded fabrics are made up of a top fabric that is glued to a thin lightweight second fabric.
- Bonding fabrics adds stability and strength to the main fabric.
- Foam is often bonded to fine knitted or woven fabric as it can be difficult to work with on its own.
- Faux leather is created by bonding woven cotton to plastic or polyurethane (PU) to create a fabric that looks like leather.
- For example, PVC is a coated fabric made by applying polyvinyl-chloride to cotton. It is then heat set to form the coated fabric.

Quilting

Quilting consists of 3 layers of fabric stitched together:

- Top layer or facing layer.
- Middle spongier layer, usually wadding.
- Lightweight inner layer.

Quilted fabrics add:

- aesthetic appeal – can be very decorative
- strength – thicker fabric, also gives more protection
- insulation – several layers trap air making it warmer to wear.



Quilting: 3 layers of fabric held together with an embroidery stitch which adds interest.