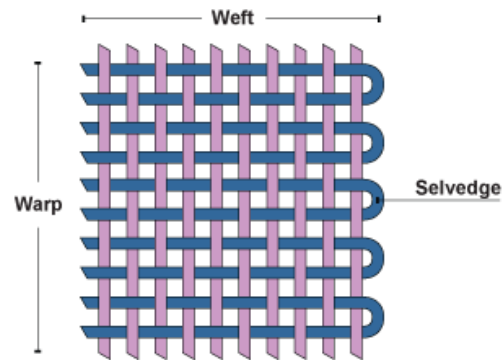


Fashion & Textiles Technical Award – Knowledge Organiser – Fabric Construction

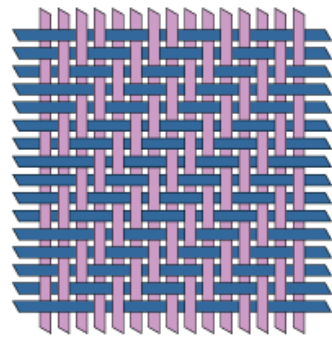
1.

Woven Woven fabrics are made up of a **weft** - the yarn going across the width of the fabric - and a **warp** - the yarn going down the length of the loom. The side of the fabric where the wefts are double-backed to form a non-fraying edge is called the **selvedge**.

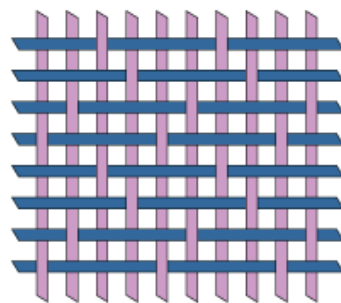
Plain-weave fabric In plain-weave fabric the warp and weft are aligned so that they form a simple criss-cross pattern. Plain-weave is strong and hardwearing, so it's used for fashion and furnishing fabrics.



Twill-weave fabric In twill-weave fabric the crossings of weft and warp are offset to give a diagonal pattern on the fabric surface. It's strong, drapes well and is used for jeans, jackets and curtains.



Satin-weave fabric In satin-weave fabric there is a complex arrangement of warp and weft threads, which allows longer float threads either across the warp or the weft. The long floats mean the light falling on the yarn doesn't scatter and break up, like on a plain-weave. The reflected light creates a smooth, lustrous (shiny) surface commonly called satin. The reverse side is invariably dull and non-shiny. Weave variations include jacquard and damask.

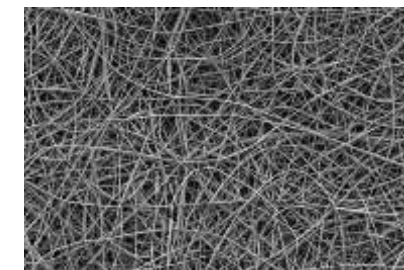


2.

Non-Woven Non-woven fabric is made by **bonding** or **felting**.

Bonded-fibre fabrics are made from webs of synthetic fibres bonded together with heat or adhesives. They are cheap to produce but not as strong as woven or knitted fabrics. Bonded-fibre fabrics are mainly used for interlining. They are easy to sew, crease resistant, do not fray and are stable when washing and dry cleaning.

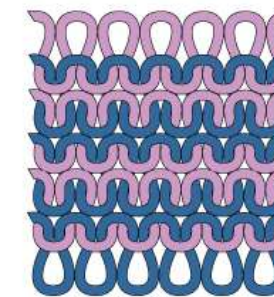
Wool felt is a non-woven fabric made from animal hair or wool fibres matted together using moisture, heat and pressure. Felt has no strength, drape or elasticity but it is warm and does not fray. Wool felt is expensive. It is used for hats and slippers and in handcrafts.



3.

Knitted There are two types of **knitted fabrics**: weft-knitted and warp-knitted.

Weft-knitted fabric Weft-knitted fabric is made by looping together long lengths of yarn. It can be made by hand or machine. The yarn runs in rows across the fabric. If a stitch is dropped it will ladder down the length of the fabric. The fabric is stretchy and comfortable and is used for socks, T-shirts and jumpers.



Warp-knitted fabric In warp-knitted fabric the loops interlock vertically along the length of the fabric. Warp knits are slightly stretchy and do not ladder. Warp-knitted fabric is made by machine. It is used for swimwear, underwear and geotextiles.

