




Section 3 Materials and their working properties

Textiles – Fibres and Fabrics

Natural fibres come from natural sources

- 1
- 2
- 3

Fibre	Appearance	Good Points	Bad Points	Used in these fabrics	Uses
Cotton 					
Wool 					
Silk 					

Cotton	Wool	Silk
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Synthetic fibres are man made

1.

2

Fibre	Appearance	Good Points	Bad Points	Used in these fabrics	Uses
Elastane (Lycra) 					
Polyester 					
Polyamide (Nylon) 					

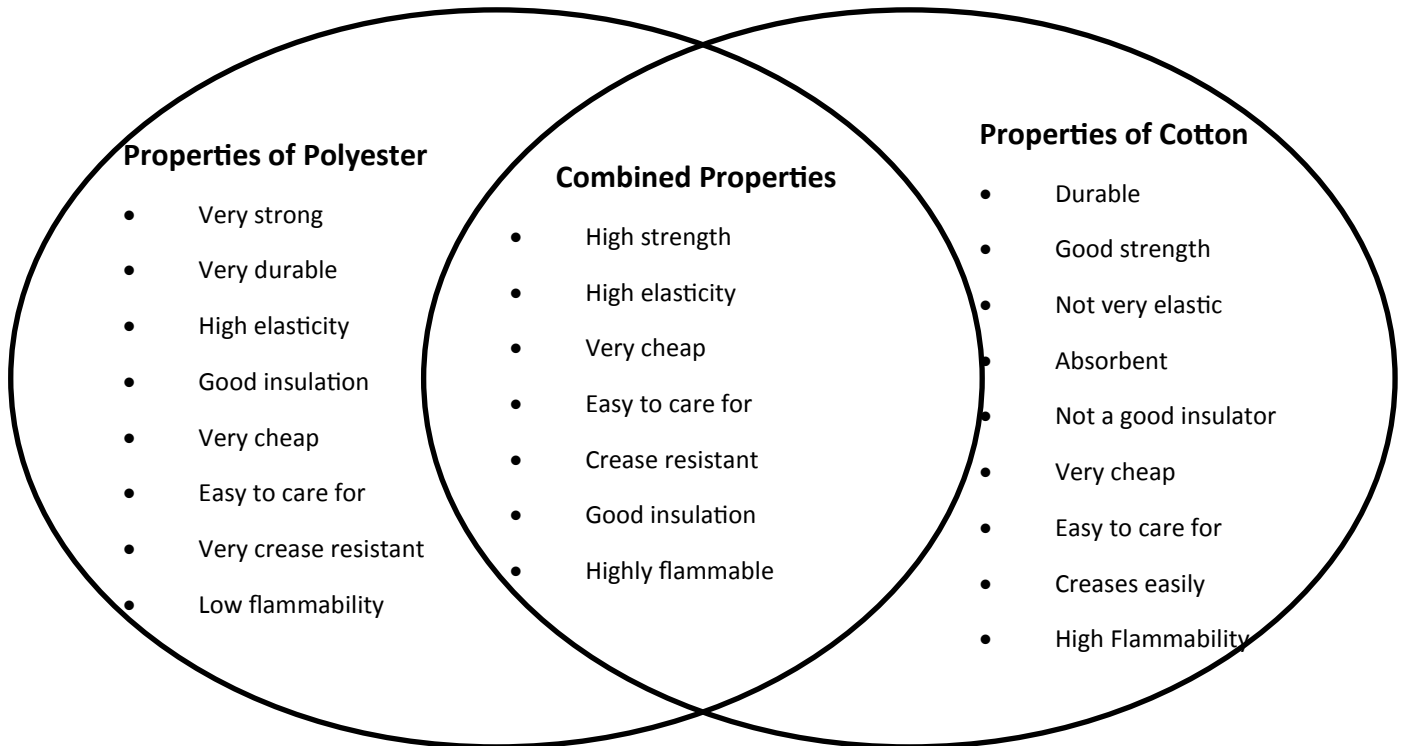
Elastane	polyester	Nylon
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Blended and Mixed fibres

The properties of a fabric can be enhanced when fibres are combined together. This is called a blend or a mixture. Textile and fabric manufacturers will blend or mix fibres depending on the product that is to be produced. This process can enhance the qualities of the resulting fabric giving it the combined properties of both fibres. One of the best known blends is that of polyester and cotton, called poly/cotton.



Fibres	Appearance	Image	Characteristics	Example uses
Poly-cotton Polyester and cotton blend	Cotton like look, easily printed and dyed, creases less than pure cotton		More durable than pure cotton but not as breathable. Can be produced more cheaply than cotton alone. Many blends available; 65% cotton 35% polyesters to 50/50 are common.	General clothing, sheets and bedding. Can be used as an alternative to most cotton products.

Samples

Section 3 Materials and their working properties

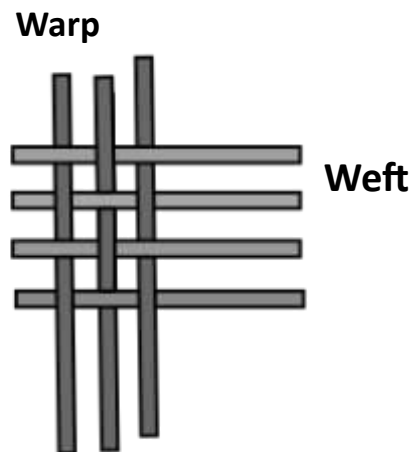
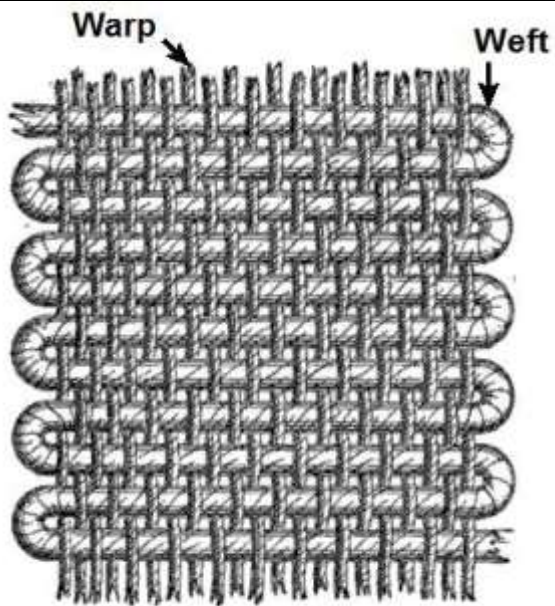
Textiles – Fibres and Fabrics

Woven fabrics

Fabrics can be made from Woven Yarns

Different woven fabrics are made by interlacing two sets of yarns—the weft, which travels from right to left, and the warp which travels up and down the weave.

Plain Weave _Copy bullet points from page 22



Samples

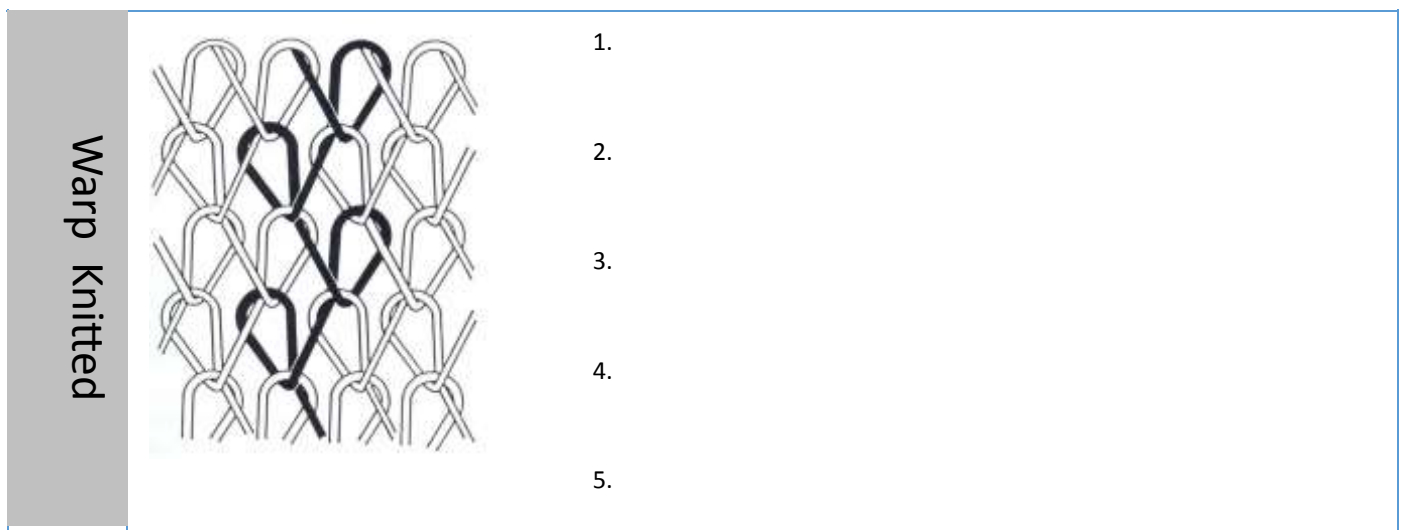
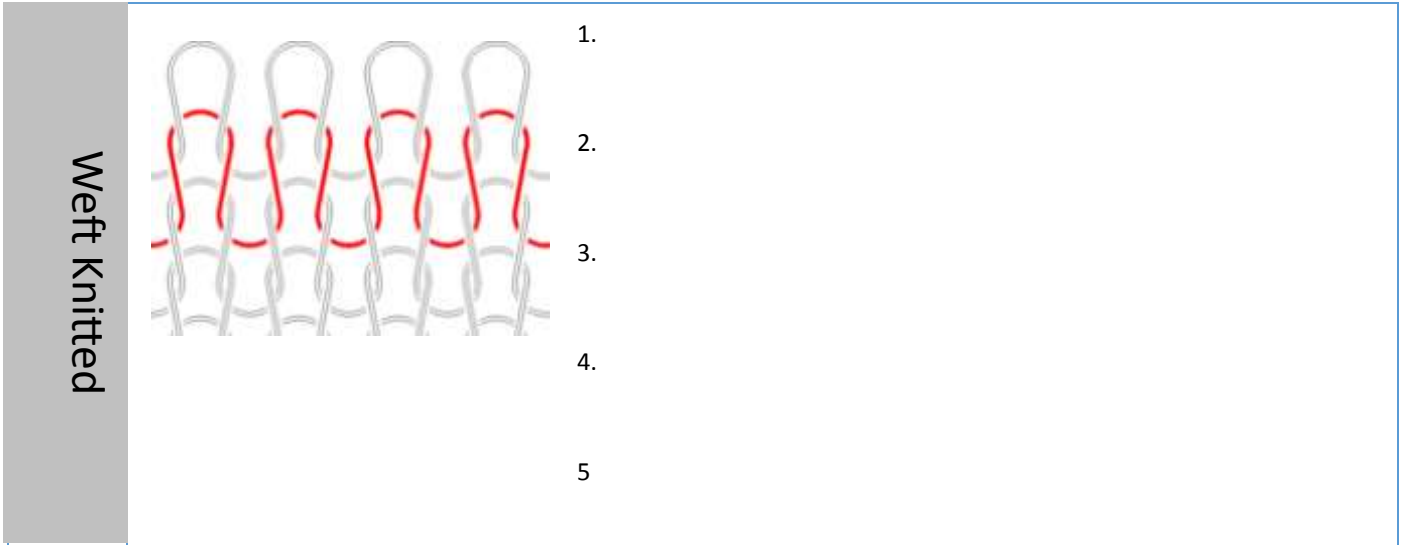
Uses—shirts, trousers, upholstery etc

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Knitted Fabrics

There are 2 main types of knitted fabrics– weft knitted and warp knitted



Samples

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Textiles – Fibres and Fabrics

Bonded or Non Woven Fabrics


Non woven fabrics are layers of fibres (not yarns) held together by bonding or felting. They don't fray, and can be cut in any direction—which means there is little waste when cutting out patterns. However, they don't stretch and are not very strong.

Bonded Fabrics

1.



2.



Felted fabrics

1.



2.

Samples