



TRANSFORMING LIVES  
Through Skilling

Supporting Partners



**CHAPTER - 8**  
**FIBRES AND FABRICS**

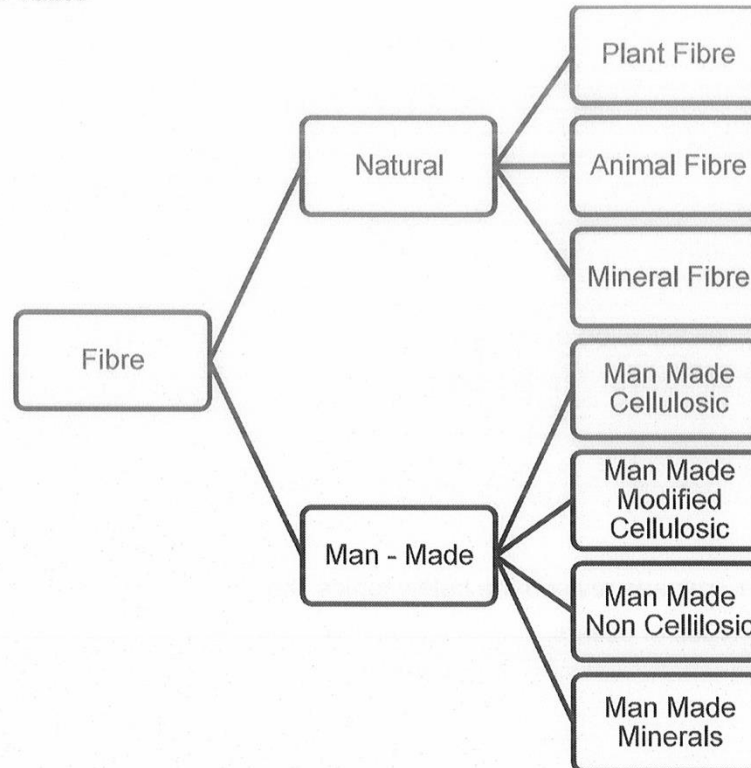
- The Trainer will display different types of fibres to the class. The Trainees will raise hands and try to identify the fibres correctly. The correct answers will be appreciated.

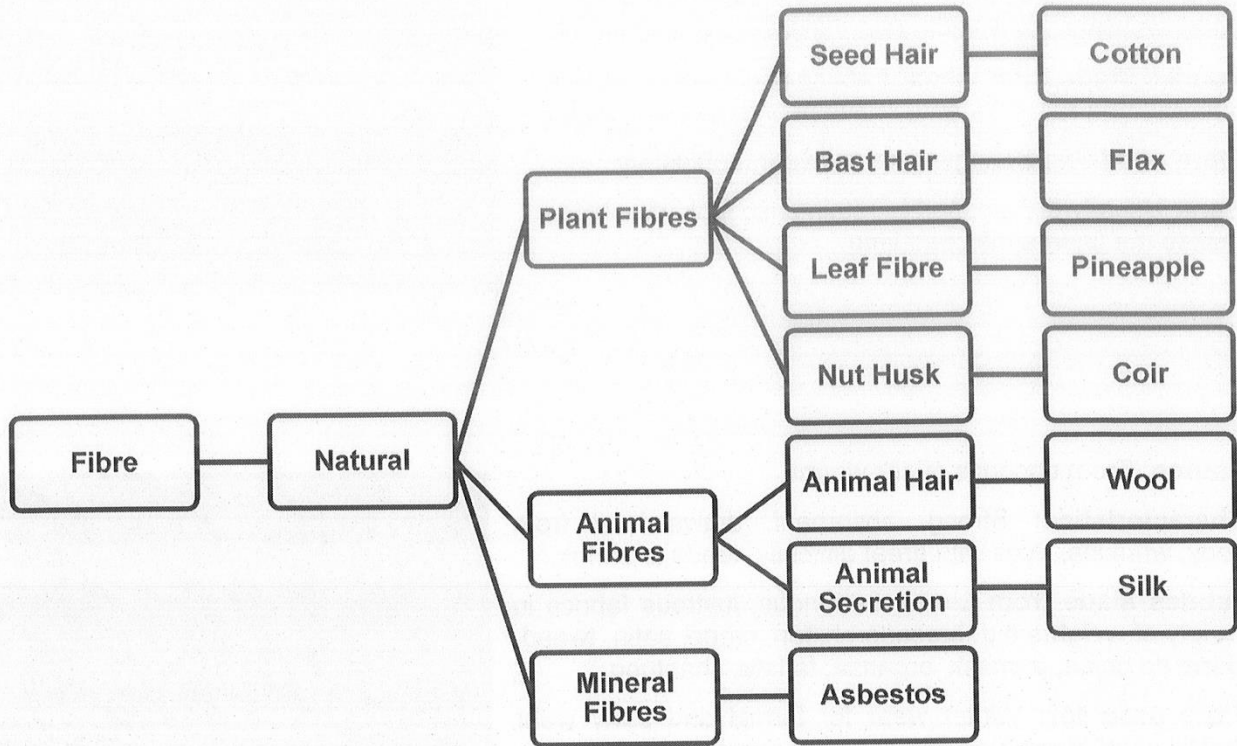
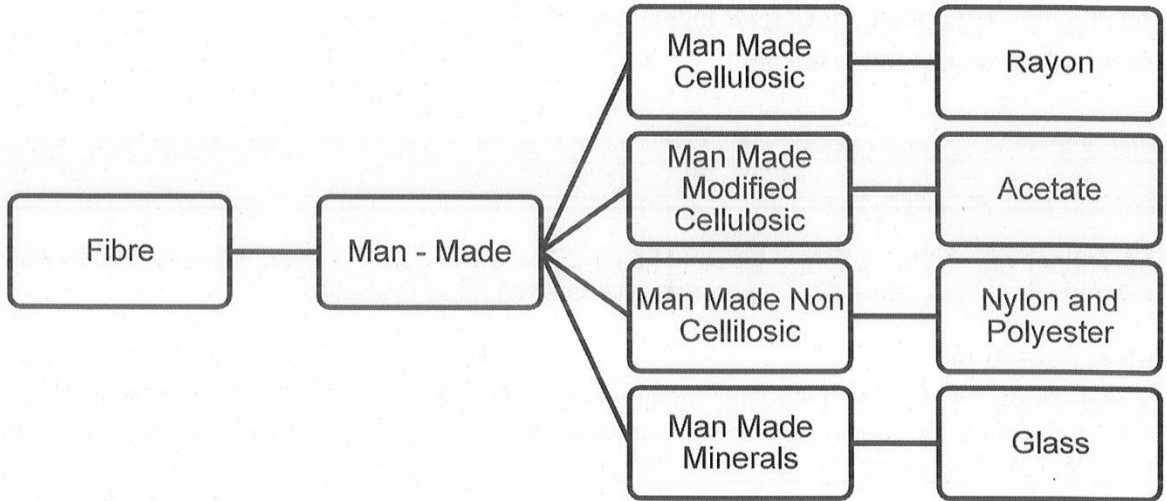
## 8.1 Fabrics: Definition

Any material prepared through weaving, knitting, spreading, crocheting, or bonding that is used in production of garments is known as Fabric. The word fabric is used in garment construction trade as synonym for textile. Fabrics can be natural or man-made depending on the fibres used.

Fabric can be used as material for making bags and baskets, clothing, carpeting, towels and many other items. They are also used for other assorted uses like flags, tents, backpacks and other crafts including sewing and quilting.

Fibre Classification Table

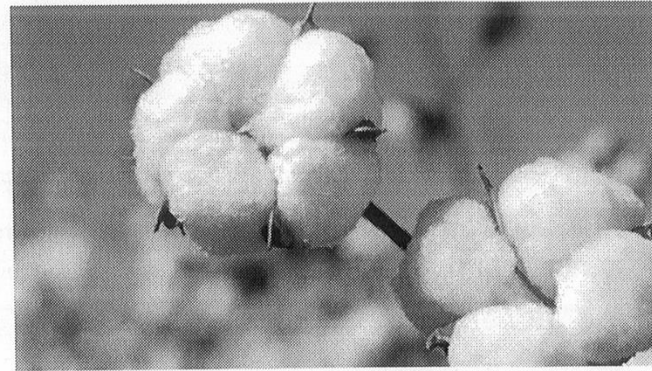




## 8.2 Different Types of Fibres

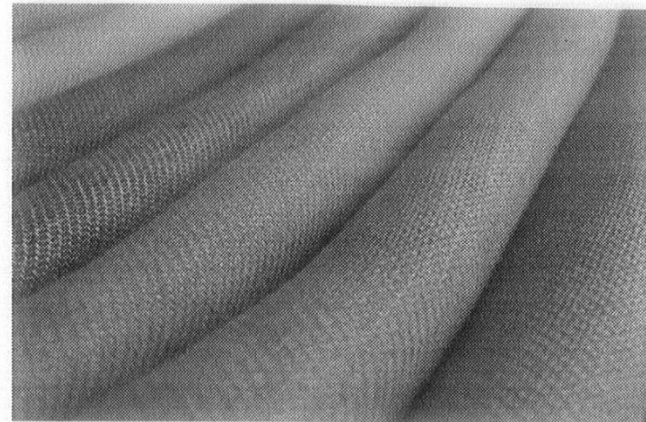
### Cotton

- **Source:** From cotton plant as pods
- **Characteristics:** Strong, even when wet, absorbent, draws heat from body, tends to wrinkle, dyes easily, prone to shrinking, and weakens with sunlight.
- **Fabrics Made from Cotton:** Corduroy, denim, poplin, terry, organdie, seersucker, cambric, drill, calico, chintz, flannelette, velveteen (a cotton fabric with short pile).
- **Fibre used for:** All season wear especially summer, work clothes, kids wear, and upholstery.
- **Care:** Can be washed by hand or by machine. Colour fast fabrics should be washed in hot water, others in warm or cold water. Should be ironed when damp to avoid creases.



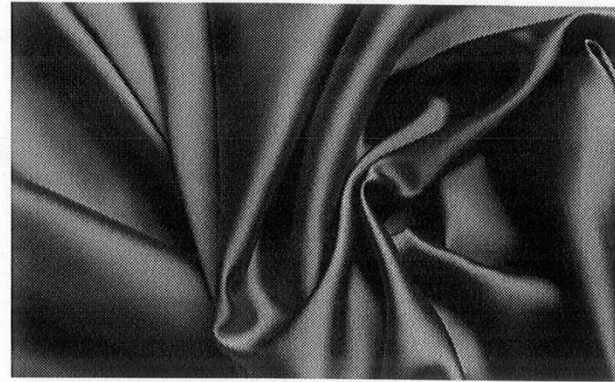
### Linen

- **Source:** From flax plant.
- **Characteristics:** Strong, absorbent, draws heat from body, wrinkles, dyes with great difficulty, tends to shrink.
- **Fabrics Made from Linen:** Fabrics usually have coarse textures and natural lustre, in heavy and medium weight.
- **Fibre used for:** Spring & summer wear, upholstery.
- **Care:** Usually dry cleaned to retain crisp look. Washing makes the linen shrink and limp.



## Silk

- **Source:** From cocoons of silk worms.
- **Characteristics:** Strong, absorbent, draws heat from body, wrinkles, dyes with great difficulty, tends to shrink.
- **Fabrics Made from Linen:** Luxurious, lustrous fabrics in variety of weights e.g. brocade chiffon, crepe, satin, tweed, crepe de chine, damask, organza, taffeta, shantung.
- **Fibre used for:** Winter wear for formal and party wear mostly used for women and lining for coats, men's shirts.
- **Care:** Usually dry-cleaned if washable, washed by hand in mild soap /Ritha in cool water. Iron at low temperature setting, do not bleach



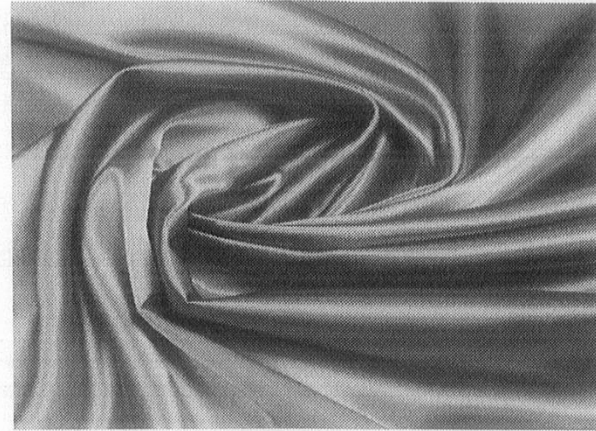
## Wool

- **Source:** From sheep and other animals.
- **Characteristics:** Strong, absorbent, draws heat from body, wrinkles, dyes with great difficulty, tends to shrink.
- **Fabrics Made from Wool:** Fabrics usually have coarse textures and natural lustre, in heavy and medium weight.
- **Fibre used for:** Winter wear for sweaters, dresses, coats, trousers etc. for everyone.
- **Care:** Usually dry cleaned to retain crisp look, can be washed but will shrink and become limp.



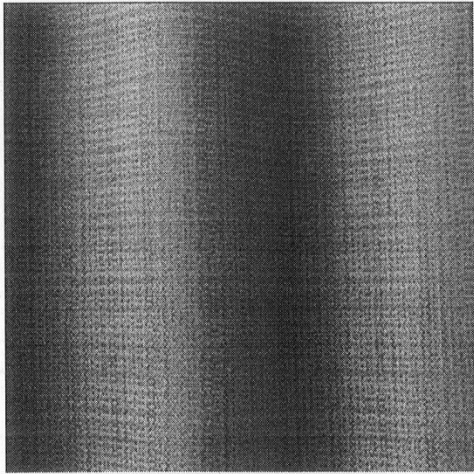
## Acetate

- **Source:** From the laboratory.
- **Characteristics:** Relatively weak, moderately absorbent, holds in the body heat, tends to wrinkle, dyes well but fades with exposure to sunlight, resists shrinking, accumulates static electricity.
- **Fabrics Made from Acetate:** Luxurious silk like fabrics with deep lustre and excellent draping quality, often blended with other fibres. e.g. brocade , crepe satin, taffeta, lace, jersey, tricot.
- **Fibre used for:** For lingerie, women's wear, in colder climates.
- **Care:** Usually dry-cleaned, may be hand or machine washed on gentle cycle. Iron at low temperatures of synthetic setting as they melt at high temperatures.



## Acrylic

- **Source:** From the laboratory.
- **Characteristics:** Strong, low absorbency, holds in body heat, resists wrinkles, dyes well, moth resistant, accumulates static electricity, tends to pill, heat sensitive.
- **Fabrics Made from Acrylic:** Soft and fluffy fabrics, sometimes with pile construction often blended with other fibres e.g. fake fur, fleece, double knit, crepe, jersey.
- **Fibre used for:** Light winter wear fabrics for sweaters, dresses and outer wear.
- **Care:** Usually laundered, can be machine washed at warm setting and tumble dried often needs no ironing.

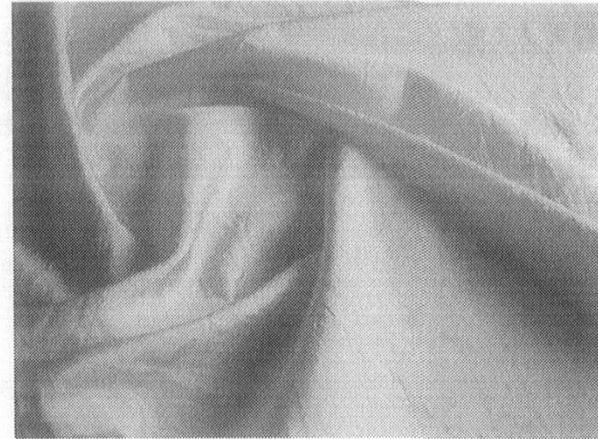


#### DO YOU KNOW?

The most expensive fibre in the world comes from the Vicuna, which is a type of camel.

## Nylon

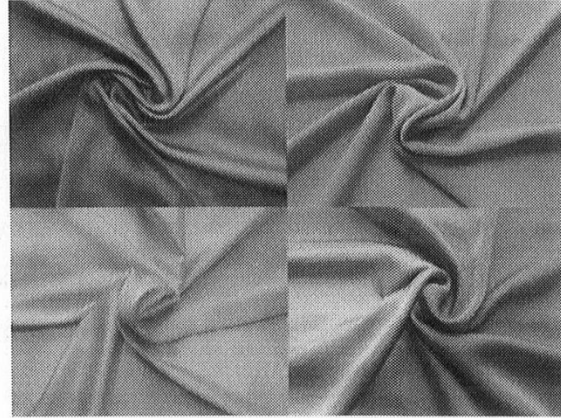
- **Source:** From the laboratory.
- **Characteristics:** Strong, low absorbency, holds in body heat, resists wrinkles, moth resistant, accumulates static electricity, and tends to pill.
- **Fabrics Made from Nylon:** Variety of fabrics of different weights and textures often blended with other fibres.
- **Fibre used for:** For lingerie, women's wear, swimsuits, saris, men's shirts.
- **Care:** Usually laundered, can be machine washed at warm setting and tumble dried/ drip dried, often needs no ironing.





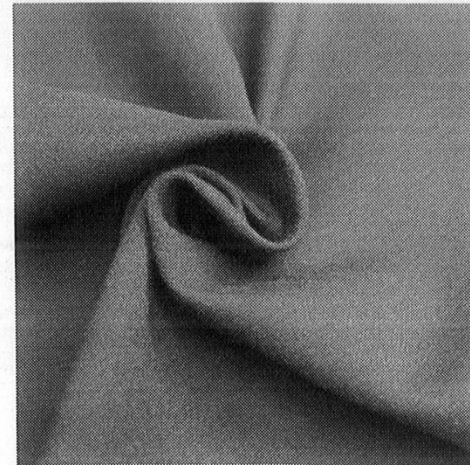
## Polyester

- **Source:** From the laboratory.
- **Characteristics:** Strong, low absorbency, holds in body heat, resists wrinkles, moth resistant, accumulates static electricity, and retains heat set pleats.
- **Fabrics Made from Polyester:** Variety of fabrics of different weights and types of construction often blended with other fibres.
- **Fibre used for:** For lingerie, women's wear, saris, upholstery, sportswear, thread, pillow filling, blended polyester is widely used as men's wear fabric for shirts, trousers and jackets.
- **Care:** Usually laundered, can be machine washed at warm setting and tumble dried/ drip dried, often needs no ironing.



## Rayon

- **Source:** From the laboratory.
- **Characteristics:** Relatively weak, moderately absorbent, holds in the body heat, tends to wrinkle and shrink dyes well.
- **Fabrics Made from Polyester:** Fabrics usually have coarse textures and natural silky lustre, in heavy, light and medium weight often blended with other fibres.
- **Fibre used for:** For women's wear and men's wear in colder climates, linings, curtains.
- **Care:** Usually dry-cleaned, may be hand or machine washed on gentle cycle. Iron at moderate setting, chlorine bleach can be used.



## Spandex/Lycra

- **Source:** From the laboratory.
- **Characteristics** Strong, non-absorbent, great elasticity, light weight.
- **Fabrics Made from Polyester:** Flexible lightweight fabrics often blended with other fibres.
- **Fibre used for:** Used for skiwear, socks, swimwear, & T-shirts, active sportswear.
- **Care:** Wash by hand or machine at gentle cycle and drip/ tumble-dried iron at low temperatures.

