

## CBSE 7 Chemistry Revision Notes

### Fibre to Fabric

There are many different types of fabric such as cotton, silk, wool, jute and synthetic. They are used to make variety of objects such as clothes, curtains, sofa covers, bed sheets and others.

**Fabrics** are made of yarns which in turn are made of fibres. Fibres originating from plants and animals are called natural fibres. Examples are cotton, silk, wool, jute. Fibres made by processing chemicals not directly obtained from plants and animals are called synthetic fibres. Examples being acrylic, polyester, nylon.

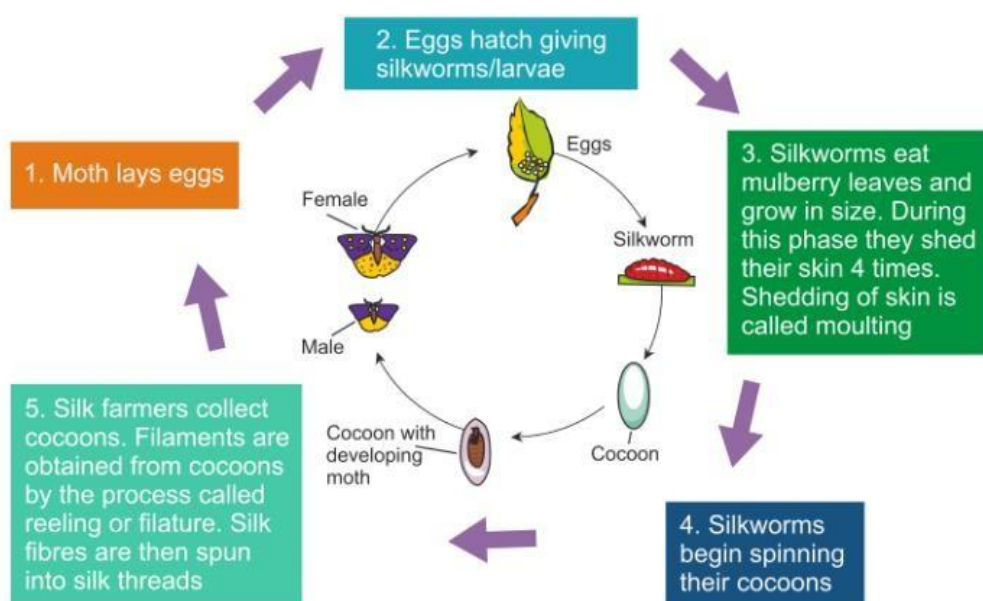
Fibres can be classified as natural fibres and synthetic fibres.

**Natural fibres** are obtained from natural sources, i.e. plants and animals.

Example: Cotton, jute, silk, wool, etc.

### Silk

- Silk comes from silkworms and wool comes from sheep, goat and yak.
- Sheep hair is sheared off from the its body, scoured, sorted, dried, dyed, spun and woven to yield wool.
- Silkworms are caterpillars of silk moth, during their life cycle, the worms spin cocoons of silk fibres. Silk fibres are separated out from the cocoon and reeled into silk threads. The silk threads can be weaved into silk cloth.



## Wool

- Animals that Yield Wool
- Apart from sheep, wool also comes from the angora goat, yak, llama, alpaca, and even camels. All these animals have a thick coat of hair or fleece, which keeps them warm. Wool is obtained from this fleece.
- Sheep wool is more commonly available in India. In Tibet and Ladakh, yak wool is more common, whereas in Jammu and Kashmir, it is the angora wool.
- The famous **Pashmina shawls** come from the soft under fur of the **Kashmiri goat**.

**Synthetic fibres** are man-made fibres and are not obtained from any plant and animal sources. Example: Nylon, Polyester and Acrylic.

Type of Fibre	Source	Examples
Natural Fibres	Natural fibres are obtained from either plants or animals	<ul style="list-style-type: none"><li>• Cotton and linen from plants.</li><li>• Wool and silk from animals</li></ul>
Synthetic or Man made fibre	Fibres that are not found and are made by man are called synthetic or man-made fibres.	<ul style="list-style-type: none"><li>• Nylon and polyester. Most fabrics made from synthetic fibres are strong and can last long. They are stretchable, waterproof and wrinkle-free.</li></ul>

### Conversion of Yarn to Fabric

For the conversion of yarn to fabric two main processes are used. They are weaving and knitting.

### Weaving

Weaving is the process of arranging two sets of yarns together perpendicular to each other to make a fabric. Fabrics are woven on looms. These looms may be operated by power or by hand.

### Knitting

Knitting is a process that makes use of a single yarn to make a piece of fabric. While knitting, a single yarn is used to make a piece of fabric.