



## Fibre to Fabric

### Prior Knowledge

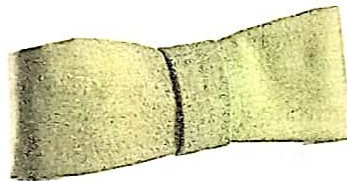
*In the previous classes, I have learnt that*

- Clothes protect us from heat, cold and rains.
- Clothes keep us safe from dust and insects.
- We wear different clothes in different seasons and on different occasions.
- Clothes are made from fibres.
- Fibres can be of two types: natural and artificial.

### Let's Get Going

Identify the source of the items given below as plant or animal. Circle the items that are obtained from plant sources.

1



Linen bow tie

2



Woollen sweaters

3



Silk saris

4



Cotton saris

### Learning Objectives

*In this chapter, I will learn about:*

- Different types of clothing materials
- History of clothes
- Types of fabrics
- Fibres
- Fibre to fabric

We need clothes to cover our body and protect us from harsh weather conditions. As we have learnt in previous classes, different clothes are preferred in different seasons and on different occasions. People in different regions wear different types of clothes.

## DIFFERENT TYPES OF CLOTHING MATERIALS

There is a large variety of clothing such as cotton, wool, rayon, silk and polyester. If we look at cotton material, we will find more than a hundred variations of it. The kind of fibre used, the type of weaving done, the colour and prints used, give us a large variety in clothing materials.



Fig. 3.1 Variety in clothing materials

## HISTORY OF CLOTHES

Human beings started wearing clothes right from the Stone Age. Initially, human beings used to cover their body with bark or big leaves of trees, and animal skin or fur.

With the development in agriculture, man learnt to grow fibre crops such as cotton, linen and jute. As stitching was not known during early times, ancient men used to drape unstitched clothing around their body. Invention of sewing needle revolutionized the clothing history. Since then stitched clothes have undergone many changes. Today, stitched clothes come in many designs. Even with the advancement in garment industry, unstitched clothes such as dhoti and sari are still worn in many parts of the country.

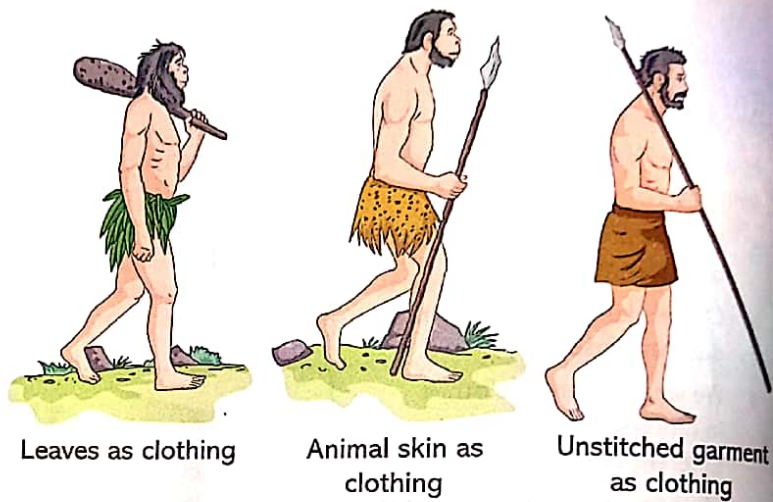


Fig. 3.2 History of clothing

## TYPES OF FABRICS

With the globalization of fashion and garment industries, a huge variety of clothes are available to people. The choice of fabric is generally decided by different factors such as weather conditions, occupation, occasion, age, gender, lifestyle and culture.



Fig. 3.3 People wearing different types of clothes



Apart from clothes, fabrics are also used in making items such as bags, blankets, curtains, carpets and shoes.

Bags can be made from jute, rexin and other clothing materials. Carpets are made from fabrics such as cotton, wool and nylon. Blankets are made from wool. Curtains are made from cotton, silk or synthetic fabrics.



Fig. 3.4 Things made from different fabrics

## FIBRES

Fibres are thin strands that are spun (twisted) together to make yarn or thread. Yarns are woven together to make fabric.

Based on the origin, fibres may be classified as natural and synthetic.

### Natural fibres

*Fibres that are obtained from plants and animals are called **natural fibres**.*

*Natural fibres that are obtained from plants are called **plant fibres**.* For example, cotton, jute, hemp, kapok and flax.

*Natural fibres that are obtained from animals are called **animal fibres**.* For example, silk and wool.

Wool mainly comes from the fleece of sheep and other hairy animals.

Silk is obtained from the cocoon of silkworm.

### Synthetic fibres

*Fibres that are made by human beings using chemical substances are called **synthetic or artificial fibres**.*

Nylon, polyester and acrylic are a few examples of synthetic fibres. Synthetic fibres are cheaper, stronger and last longer than natural fibres. Clothes made of synthetic fibre are easy to maintain. Synthetic fibres are also used to make things such as carpets, ropes and curtains.

### Your Task

Many people use things such as shoes, bags and jackets that are made from animal skin. Do you think it is okay to kill animals for their skin? Does this habit have any negative environmental impact? Do some research on it.

Also, make a poster to motivate people to use more of plant fabric than animal skin.

### Let's Investigate

Find out why silk and wool keep us warm and cotton keeps us cool.

### Tech Updates

Fabrics made by mixing two or more fibres together are called **blended fabrics**. Fabrics are blended to improve texture, feel and appearance. For example, cotton is breathable and comfortable to wear, but shrinks or wrinkles when washed. On the other hand, polyester is strong and does not shrink, but uncomfortable to wear. However, when cotton and polyester are blended together, a new fabric, polycot is obtained which is comfortable to wear and does not shrink or wrinkle when washed. Polywool, cottonwool and terywool are some other blended fabrics.