

# St. Andrews Scots Sr. Sec. School

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Session: 2022-2023

Subject: Science

Class: VI

L-3: Fibre To Fabric

Topic: Ques/Ans

## CHECK POINT 1 (Pg-26)

### 1. Fill in the blanks:-

- (a) The thin threads that form cloths are called **fibres**.
- (b) The two types of fibres are **natural** and **synthetic**.
- (c) Terrycloth is made from **cotton**.
- (d) **Jute** is hundred percent biodegradable.
- (e) **Coir** is the fibre we get from the outer covering of the fruit of the coconut palm.

### 2. Why do traditional clothes vary from place to place?

Ans) The kind of clothes people wear mainly depends on the climate of the place they live in and their lifestyle. That is why traditional clothes vary from place to place.

### 3. What are the various uses of jute?

Ans) The various uses of jute are:

- a) To make sacks and ropes
- b) Household products

### 4. Name any two synthetic fibre.

Ans) Nylon, Terrylene are the two synthetic fibre.

### 5. How is coir made?

Ans) Coir is the fibre obtained from the outer covering of the fruit of the coconut palm. Coconuts are soaked in water and the husk is removed. The husk is then beaten to get the fibre called coir.

### 6. What did human beings in olden days wear?

Ans) In olden days, the clothes worn by human beings were made of animal skins and different types of furs.

## CHECK POINT 2 (Pg-28)

### 1. Fill in the blanks:-

- (a) Wool is obtained from the hair of sheep, rabbit and deer.
- (b) The process of removing wool from sheep by using special clippers is called shearing.
- (c) Wool retains air because it is a fluffy fibre.
- (d) A silkworm spins silk thread around cocoon.
- (e) The rearing of the silkworms to produce silk is called sericulture.

### 2. How is wool made from the hair of sheep?

Ans) The first step is shearing in which wool from the sheep is removed by using special clippers. After shearing, the wool is packed in bales. It is cleared and combed by a machine in mills and then separated and spun into a fibre. This fibre is then woven or knitted to make woollen clothes.

### 3. Where was silk first used and made?

Ans) Silk was first used and developed in China about 7000 years ago.

### 4. What was the Silk Route?

Ans) From China, silk came to India, and then went to the Middle East, Europe and Africa. Silk trade was so extensive and important that the major set of trade routes between Europe and Asia came to be known as the Silk Route.

## CHECK POINT 3 (Pg-30)

### 1. Match the correct answer:-

- |                |   |                       |
|----------------|---|-----------------------|
| (a) Nylon      | → | (i) Weaving           |
| (b) Takli      | → | (ii) Warp             |
| (c) Loom       | → | (iii) Synthetic Fibre |
| (d) Horizontal | → | (iv) Hand spindle     |
| (e) Vertical   | → | (v) Weft              |

### 2. What is spinning?

Ans) The process of making yarn from fibres is called **spinning**.



**B. Very short answer questions.**

1. Name the major trade route between Europe and Asia.

Ans) Silk Route

2. Name the process used for making yarn from fibre.

Ans) Spinning

3. Name the machine used for weaving of fabric.

Ans) Loom

4. These two are the fibres that we obtained from plants.

Ans) Jute and Cotton

5. Cotton fabrics are mainly worn in which season?

Ans) Summer Season

6. The fabric made from this material is known as burlap. Name the material.

Ans) Jute

7. What are mattresses made from?

Ans) Coir

8. What are jute sacks called?

Ans) Gunny bags

**C. Short answer questions.**

1. What type of weather conditions are not suitable for wearing synthetic clothes?

Ans) Hot and humid weather conditions are not suitable for wearing synthetic clothes. This is because they have less absorption capacity and hence these fabrics do not absorb sweat.

2. Give two uses of the following:- a) Jute b) Cotton

Ans) a) Two uses of jute are as follows.

i) Jute is woven into curtains, chair coverings, carpets and rugs.

ii) Jute is used to make jute sacks or gunny bags for the packaging industry.

b) Two uses of cotton are as follows.

i) Cotton is used to make a number of textile products such as shirts, socks, innerwear, towels and bedsheets.

ii) Sterilised cotton is used in clinics and hospitals for medical purposes.

3. What are animal fibre? Name any two.

Ans) Animal fibres are fibres obtained from animals. They are listed below.

- a) Wool: It is obtained from the hair of sheep and some other animals like rabbit and deer.
- b) Silk: It is obtained from the cocoon of the silkworm.

4. What are looms? What are they used for?

Ans) Looms are machines used for weaving fabrics. They may be either hand operated or power operated. In weaving, two distinct sets of yarns or threads, called the warp and the filling or weft, are interlaced with each other to form a fabric or cloth. The warp threads run lengthways of a piece of cloth and the weft threads run across from side to side.

5. What are synthetic fibres?

Ans) Fibres obtained artificially by chemical processes are called synthetic fibres. Nylon, rayon and polyester are common synthetic fibres. They are made from chemicals that are mainly obtained from petroleum. Clothes made from synthetic fibres dry quickly and do not wrinkle easily.

6. What are terrycloth?

Ans) Terrycloth is a fabric made from cotton. It is used to make highly absorbent bath towels and robes. Terrycloth is also used to make denim for blue jeans and jackets.

7. Is jute a biodegradable fibre?

Ans) Yes, jute is a 100 per cent biodegradable fibre. So, it is used to make things which cannot be made using synthetic fibres. For example, jute is used to make containers for young saplings which can be planted directly along with the container.

8. Why do we wear woollen clothes in cold weather?

Ans) Wool is a fluffy fibre and hence retains air. Since air is a bad conductor of heat, wool has the property of retaining heat. Woollen clothes do not allow our body heat to escape and thus keep us warm. Therefore, we wear clothes made from wool in cold weather.

9. Name any two items made from coconut fibres.

Ans) Two things made from coconut fibres are listed below.

- 1. Mats are made from coconut fibres.
- 2. Stuff mattresses are made from coir.

10. Why do many people believe it is not right to use silk?

Ans) Silk is obtained from the cocoon of the silkworm. Many people believe that it is not right to use silk as silkworms are killed in boiling water while obtaining silk.

#### **D. Long answer questions.**

1. Explain knitting. What is done by knitting?

Ans) Knitting is a method by which a thread or yarn is turned into cloth. In knitting, a single yarn is used to make a piece of fabric. Knitting consists of loops called stitches which are pulled through each other. A set of stitches are held on a needle until another loop can be passed through them. Knitting may be done by hand or by machine. There are numerous styles and methods of knitting by hand. Woollen clothes are made by knitting.

2. What is sericulture? Where did it originate?

Ans) The rearing of silkworms to produce silk is called sericulture. Silk was first used and developed in China about 7000 years ago. From China it came to India, and then went to the Middle East, Europe and Africa. Silk trade was so extensive and important that the major set of trade routes between Europe and Asia came to be known as the Silk Route.

3. How are woollen clothes made from wool?

Ans) Wool is the fibre obtained from the hair of sheep and some other animals like rabbit and deer. The first step is shearing or removing wool from sheep by using special clippers. After shearing, the wool is packed in bales. It is cleaned and combed by a machine in mills and then separated and spun into a fibre. This fibre is then woven or knitted to make woollen clothes.

4. Describe cotton and its uses.

Ans) Cotton is a soft, staple fibre that grows in a form known as 'boll', around the seeds of the cotton plant. The fibre is collected by either hand-picking or machines. The fibre is most often spun into yarns or threads and is used to weave a soft, breathable textile. It is the most widely used natural fibre. The uses of cotton are as follows:

- a) Cotton is used to make a number of textile products such as socks, innerwear, T-shirts and bed sheets.
- b) Cotton is used to make terrycloth. Terrycloth is used to make highly absorbent bath towels and robes.
- c) Cotton is used to make denim. Denim is used to make blue jeans.
- d) Cotton is used to make khadi. It is a hand-made fabric.
- e) Cotton is widely used to stuff mattresses.
- f) Cotton is first sterilised and then used for clinical purposes also.

5. What are synthetic fibres? What are their advantages over natural fibre?

Ans) The fibres obtained artificially by chemical processes are called synthetic fibres. Nylon, rayon and polyester are common synthetic fibres. They are made from chemicals that are mainly obtained from petroleum. Synthetic fibres have the following advantages over natural fibres.

- a) Clothes made from synthetic fibres are stronger than the clothes made from natural fibres.
- b) Clothes made from synthetic fibres dry quickly.
- c) Clothes made from synthetic fibres do not wrinkle easily.

6. Write a paragraph on any two of the following:

- a) weaving                      b) knitting                      c) spinning

Ans) a) **Weaving:** The process of arranging two sets of yarns together to make a fabric is called weaving. Weaving of fabric is done on looms. Looms are either hand operated or power-operated. In weaving, two distinct sets of yarns or threads, called the warp and the filling or weft, are interlaced with each other to form a fabric or cloth. The warp threads run lengthways of a piece of cloth, and the weft threads run across from side to side. The manner in which the warp and weft threads interlace with each other is known as the weave.

b) **Knitting:** Knitting is a method by which a thread or yarn is turned into cloth. In knitting, a single yarn is used to make a piece of fabric. Knitting consists of loops called stitches which are pulled through each other. A set of stitches are held on a needle until another loop can be passed through them. Knitting may be done by hand or by machine.

7. What is silk?

Ans) Silk is an animal fibre obtained from the cocoon of the silkworm. Silkworms are insects which feed on the leaves of mulberry trees. A silkworm secretes a silk (raw) thread which it spins around itself. Each silkworm spins a continuous thread of up to 800 metres long to make a cocoon. The cocoon is boiled in water to kill the silkworm. Then, the cocoon is unwound to get the silk fibre. The rearing of silkworms to produce silk is called sericulture. Silk is an expensive fibre.

8. What are the special qualities of jute?

Ans) Jute is a long, soft, shiny plant fibre produced from the skin of the jute plant's stem. It can be spun into coarse, strong threads. It is the second most important plant fibre after cotton.

The special qualities of jute are as follows:

- a) Jute is one of the cheapest natural fibres and is second only to cotton in the amount produced and variety of uses.
- b) Jute fibre, because of its strength, is used to make gunny bags to pack agricultural produce. Jute sacks are used in packaging industry.
- c) Jute fibre is 100 per cent biodegradable. It is, thus, used to make things which cannot be made using synthetic fibres. For example, jute is used to make containers for young saplings which can be planted directly along with the container.
- d) Very fine threads of jute can be separated out and made into imitation silk.
- e) Jute fibres are also used to make pulp and paper.

### E. Let's Think.

1. Why are we advised to wear silk in winters but not in summers?

Ans) Very tightly woven silk fabrics are used in cold weather clothing because the very close threads trap body heat next to the skin and help keep us warm.

2. Natural substances such as cotton bolls and coconut skin are used to make fabric. Can you think of more such natural materials from your surroundings that can be used to make fabric?

Ans) **Animal hair (wool or hairs):** Fibre or wool taken from animals or hairy mammals, e.g. sheep's wool, goat hair (cashmere, mohair), alpaca hair, horse hair.

**Silk fibre:** Fibre secreted by glands (often located near the mouth) of silk worms during the preparation of cocoons.

**Avian fibre:** Fibres from birds, e.g., feathers and feather fibres.

3. Do you think that the use of animal fibre is ethical? Justify your answer.

Ans) The use of animal fibre is not ethical as many animals get hurt or are killed to obtain the fibre. Silk is obtained by boiling the cocoons of the silkworms, a process in which they get killed. While shearing sheep, Angora rabbits and cashmere goats, the clippers may cut their skin and cause injury.

From the tiniest silkworm to the largest llama, all animals used by the clothing industry suffer and most are hurt in the process.

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