

Chapter 3: Fibre to Fabric

NCERT Exemplar · Class 6 · Science

Multiple Choice Questions

Question 1

Paheli wants to present her friend with a gift made of plant fiber. Which out of the following will she select?

A.

Jute bag

B.

Woollen shawl

C.

Silk saree

D.

Nylon scarf

Answer

Correct option: A

Solution

Ans: The correct answer is option (a).

Jute is the plant fiber that is obtained from jute plant *Corchorus capsularis*. It is long, soft & shiny in nature. The other fibers such as woollen & silk are obtained from sheep & silk-worm. Nylon is the man-made fiber.

Question 2

Which statement out of the following is incorrect?

A.

Use of Charkha was popularised by Mahatma Gandhi as a part of the Independence Movement.

B.

In India, jute is mainly grown in Kerala and Punjab.

C.

To make fabric, the fibres are first converted into yarns.

D.

Sufi saint Kabir was a weaver.

Answer

Correct option: B

Solution

Ans: The correct answer is option (b).

In India jute is mainly grown in West Bengal, Bihar, and Assam, not in Kerala and Punjab.

Question 3

Which of the following materials did people use in ancient times for making clothes?

(i) Leaves of trees

(ii) Newspaper

(iii) Metal foils

(iv) Animal skins and furs

A.

(i) and (ii)

B.

(i) and (iii)

C.

(ii) and (iii)

D.

(i) and (iv)

Answer

Correct option: D

Solution

Ans: The correct answer is option (d).

People use leaves of trees, animal skins & furr to cover their bodies.

Question 4

Which of the following is not a natural fibre?

A.

Cotton

B.

Jute

C.

Nylon

D.

Flax

Answer

Correct option: C

Solution

Ans: The correct answer is option (c).

Nylon is the man-made fiber. It is a type of plastic that is derived from crude oil.

Question 5

Which set of substances is not used for making fibres?

A.

Silk, chemicals

B.

Yak hair, camel hair

C.

Husk, bones

D.

Flax, wool

Answer

Correct option: C

Solution

Ans: The correct answer is option (c).

Husk & bones are not used for making fibers.

Question 6

Boojho went to a cloth shop. There he found a fabric which was smooth to touch, had vibrant colour and shine. The fabric could be

A.

Cotton

B.

Wool

C.

Silk

D.

Jute

Answer

Correct option: C

Solution

Ans: The correct answer is option (c).

Silk is the animal fiber that is obtained from silkworm *Bombyx mori*. It is soft, shiny & vibrant in colour.



Question 7

Which part of the jute plant is used for getting jute fibre?

A.

Flower

B.

Stem

C.

Fruit

D.

Leaf

Answer

Correct option: B

Solution

Ans: The correct answer is option (b).

Jute is the plant fiber that is obtained from the stem of jute plant *Corchorus capsularis*.

Question 8

Yarn is woven to get fabric using

A.

charkha

B.

spinning machines

C.

looms

D.

knitting needles

Answer

Correct option: C

Solution

Ans: The correct answer is option (c).

Looms are used to weave the yarn.

Question 9

Beera is a farmer. His field has black soil and the climate is warm. Which fibre yielding plant should he grow in his field?

A.

Jute

B.

Cotton

C.

Coconut

D.

Wool

Answer

Correct option: B

Solution

Ans: The correct answer is option (b).

Both the situations are in the favour of cultivation of cotton plants.

Question 10

The correct sequence to get cloth is:

A.

fibre → fabric → yarn

B.

fibre → yarn → fabric

C.

fabric → yarn → fibre

D.

yarn → fibre → fabric

Answer

Correct option: B

Solution

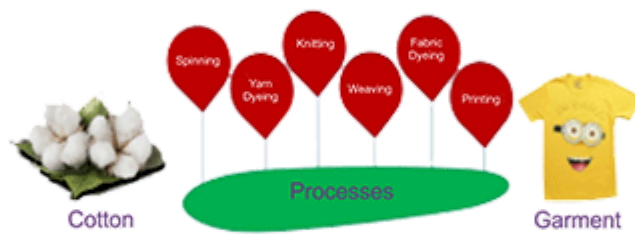
Ans: The correct answer is option (b).

Fibre is converted into fabric through the three processes such as spinning, weaving & knitting.

Spinning: It is the process which involves the conversion of fiber into yarn.

Weaving: It is the process which involves the arrangement of two sets of yarn into fabric.

Knitting: It is the process which involves the manipulation of yarn to create a textile for using many types of garment.



Question 11

Boojho wants to make yarn from fibre at home. Which of the following will he use to carry out the task?

A.

Powerloom

B.

Handloom

C.

Charkha

D.

Knitting needles

Answer

Correct option: C

Solution

Ans: The correct answer is option (c)

Spinning is the process which involves the conversion of fiber into yarn.

Charkha is the hand operated device used for spinning.



Very Short Answer Questions

Question 12

Yarn, fabric and fibres are related to each other. Show the relationship by filling the blanks in the following sentence.

Fabric of cotton saree is made by weaving cotton which in turn is made by spinning thin cotton

Solution

Ans: Fabric of cotton saree is made by weaving cotton into yarn which in turn is made by spinning thin cotton fibers.

Spinning: It is the process which involves the conversion of fiber into yarn.

Weaving: It is the process which involves the arrangement of two sets of yarn into fabric.

or

Knitting: It is the process which involves the manipulation of yarn to create a textile for using many types of garment.

Question 13

Some terms related to fabrics are jumbled up and given below. Write them in their correct form.

(a) onttoc

(b) sinnping

(c) vingwea

(d) bisref

Solution

Ans: Cotton

It is the natural, soft fiber that grows with the seeds of the cotton plant. After the cotton fiber is gathered from the plant, it can be spun into cotton thread. The cotton thread can then be made into cloth.

Ans: Spinning

It is the process which involves the conversion of fiber into yarn

Ans: Weaving

It is the process which involves the arrangement of two sets of yarn into fabric.

Ans: Fibers

Fiber is long and thin, like hair.

Question 14

State whether the following statements are true or false. If false, correct them.

- (a) Silk is a plant fibre.
- (b) Jute is obtained from the leaves of a plant.
- (c) Weaving is a process of arranging two sets of yarn together.
- (d) Cotton yarn on burning gives an odour similar to that of a burning paper.

Solution

Ans: This statement is false.

Silk is the animal fiber that is obtained from silkworm *Bombyx mori*. It is soft, shiny & vibrant in colour.

Ans: This statement is false.

Jute is the plant fiber that is obtained from the stem of jute plant *Corchorus capsularis*.

Ans: This statement is true.

Ans: This statement is true.

This is because both are plant products.

Question 15

The following is an answer given by Boojho to a question asked by his teacher— “Cotton, wool, silk and jute are classified as natural fibres whereas nylon and polyester are classified as synthetic fibres.” Can you tell what question the teacher has asked?

Solution

Ans: The question that was asked by the teacher was:-

To classify the following fibers into natural & synthetic ones:- Cotton, wool, silk jute, nylon, and polyester.

Question 16

Once, Paheli visited a tailor shop and brought home some cuttings of fabric to study their properties. She took two pieces and found that one of the pieces was shrinking when it was burnt with a candle. However the other did not shrink on burning. Can you help her to find out which of the two a cotton fabric was and which silk fabric?

Solution

Ans: The silk fiber is made up of proteins, so that silk fiber shrunk while cotton fiber did not.

Question 17

One way of making fabric from yarn is weaving, what is the other?

Solution

Ans: The other method to prepare the fabric from yarn is Knitting (the process which involves the manipulation of yarn to create a textile for using many types of garment).

Short Answer Questions

Question 18

Boojho with perfect eyesight was finding it difficult to pass a thread through a needle. What can be the possible reason for this?

Solution

Ans: This is because there is a problem with the thread not with eyesight. Thread can be either too thick or split into two.

Question 19

In ancient times stitching was not known. People used to simply drape the fabrics around different parts of their body. Even today a number of unstitched fabrics are used by both men and women. Can you give four such examples of clothes?

Solution

Ans: The examples include Dhoti, Saree, Turban & Lungi.

Question 20

Match the articles given in Column I with the articles of Column II

Column I	Column II
Sweater	Cotton
Cotton balls	Wool
Dhoti	Ginning
Gunny bags	Jute

Solution

Ans:

Column I	Column II
Sweater	Wool
Cotton balls	Ginning
Dhoti	Cotton
Gunny bags	Jute

Explanation:

Sweater is mainly prepared from wool.

Ginning is the process in which the cotton fibres are separated from the cotton seeds.

Dhoti is made up of cotton.

Gunny bags are made up of jute. They are used for storage purposes.

Question 21

Fill in the blanks to complete the life story of cotton fibre.

My parents' cotton plants were grown in (i) _____ soil and (ii) _____ climate. The plants bore fruits called (iii) _____. I, the cotton fibre was separated from seeds in the cotton bolls by the process of (iv) _____. Other cotton fibres and I were made into yarn by the process of (v) _____. The yarn was (vi) _____ to give beautiful colours and then (vii) _____ to get cotton fabric.

Solution

Ans: My parents' cotton plants were grown in (i) Black soil and (ii) warm climate. The plants

bore fruits called (iii) Cotton. I, the cotton fibre was separated from seeds in the cotton bolls by the process of (iv) Ginning. Other cotton fibres and I were made into yarn by the process of (v) Spinning. The yarn was (vi) Dyed to give beautiful colours and then (vii) woven to get cotton fabric.



Question 22

Match the terms given in Column I with the statements given in Column II

Column I	Column II
Weaving	A single yarn used to make a fabric
Knitting	Combing of cotton fibres to remove seeds
Spinning	Yarns are made from these thin strands
Ginning	These are spun from fibres and then used to make fabrics
Fibre	Process of arranging two sets of yarns together to make a fabric
Yarn	Process of making yarn from fibers

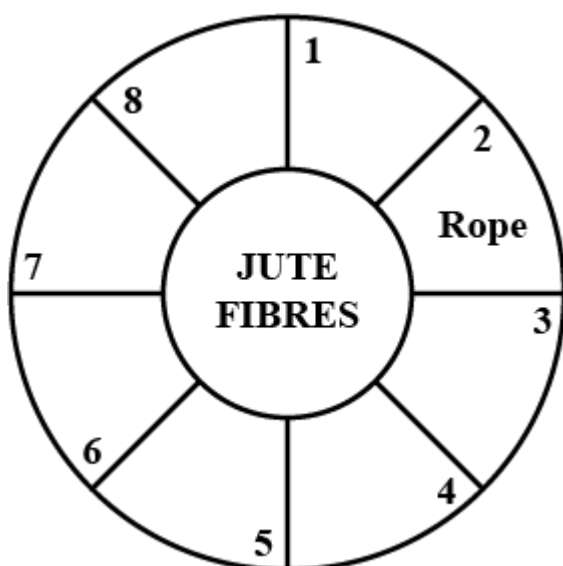
Solution

Ans:

Column I	Column II
Weaving	Process of arranging two sets of yarns together to make a fabric
Knitting	A single yarn used to make a fabric
Spinning	Process of making yarn from fibers
Ginning	Combing of cotton fibers to remove seeds
Fibre	Yarns are made from these thin strands
Yarn	These are spun from fibers and then used to make fabrics

Question 23

Fill in the names of useful items made from jute fibres in Fig. 3.1. One such example is given.



Solution

Ans:

List of items made up of jute fibers are-:

- | | |
|---------------|---------------|
| 1. Rope | 5. Mattress |
| 2. Jewellery | 6. Carpet |
| 3. Gunny bags | 7. Home Decor |
| 4. Handbags | 8. Jute dolls |

Long Answer Questions

Question 24

A cotton shirt, before it reaches you, completes a long journey. Elaborate this journey starting from cotton bolls.

Solution

Ans: The procedure of making cotton shirt is -:

Picking → Ginning → Spinning → Weaving → Sewing

1. Picking: During this process cotton balls are picked up from the plants in the field by hand.
2. Ginning: It is the process in which the cotton fibers are separated from the cotton seeds.
3. Spinning: It is the process that involves the conversion of fiber into yarn.
4. Weaving: It is defined as the process of arranging two sets of yarns together to make a fabric.
5. Sewing: During this cotton fiber are stitched into shirts.



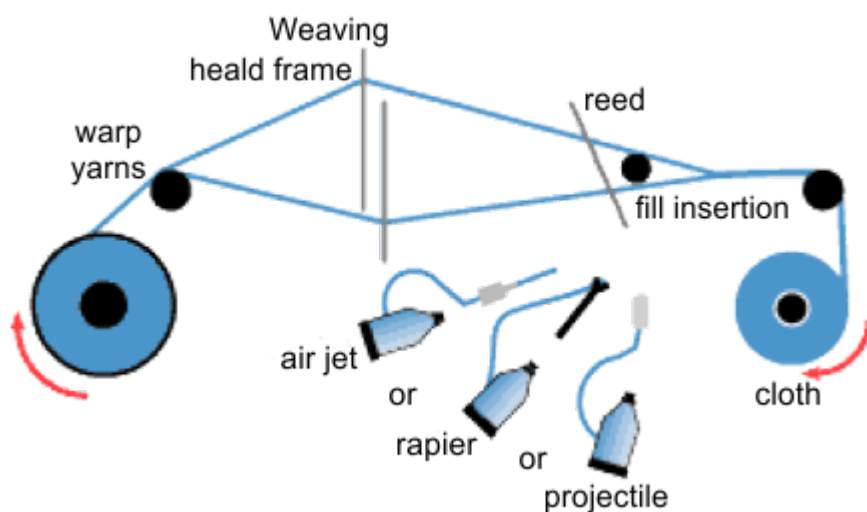
Question 25

Describe the two main processes of making fabric from yarn.

Solution

Ans: The two main processes of making fabric from yarn are:-

1. Weaving: In this process the two sets of yarns are woven at a right angle to make fabric. The weaving of fabric is done on looms. The looms can be either hand operated or power operated.



2. Knitting: In this process the fabrics are made by interlocking loops of single yarn with knitting needles or machines. Socks and many other clothing items are made of knitted fabrics.

