पुना International School

Shree Swaminarayan Gurukul, Zundal

WELCOME

TO

PUNA INTERNATIONAL SCHOOL

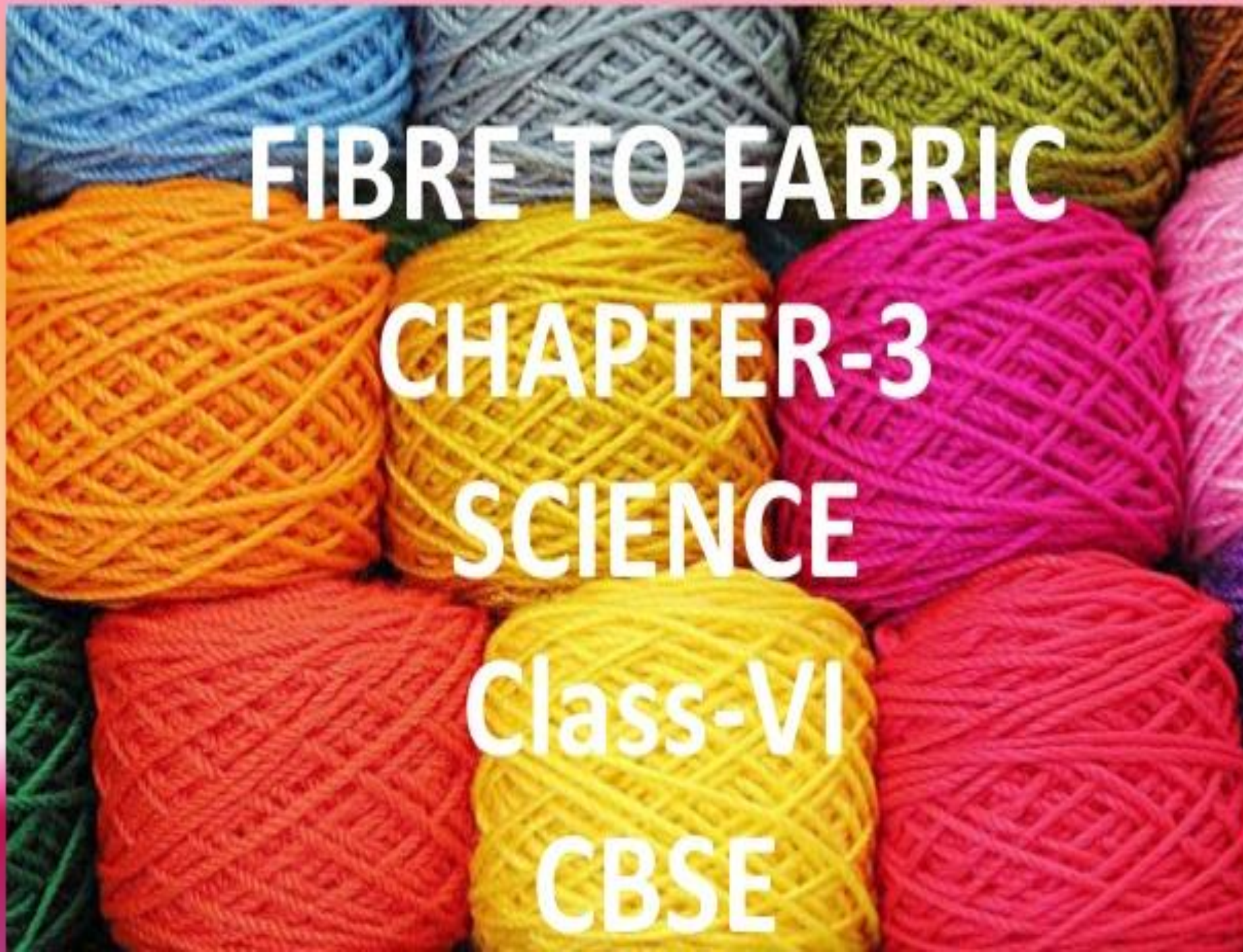
SCIENCE

CLASS - VI

NCERT Solutions

Class 6 Science

3 Fibre to Fabric


FIBRE TO FABRIC
CHAPTER-3
SCIENCE
Class-VI
CBSE

TEACHING - AID

- Key points
- Answers in very short
- Answers in short
- Long que/ans
- Diagrams
- Flow chart
- Activity

FIBRE

A material which is available in the form of thin and continuous strand is called **FIBRE.**

There are two types of fibre, viz.

1) Natural fibre and
2) Man-made Fibre or Synthetic Fibre

TYPES OF FIBRE:

NATURAL FIBERS

The fibers which are obtained from plants and animals are called Natural Fibers.

Examples: cotton, jute, silk, wool.

MAN-MADE FIBERS

The fibers that are synthesized in laboratory are called **Man-made Fiber.**

Examples: Nylon, Acrylic, terrylene, terry-cotton Polyester etc.

TYPES OF NATURAL FIBRE:

PLANT FIBRE:

The fibers which are obtained from plants and animals are called Plant fibers.

Examples: Cotton, jute and flex.

ANIMAL FIBRE:

The fibers which are obtained from plants and animals are called Animal fibers.

Examples: Silk and wool.

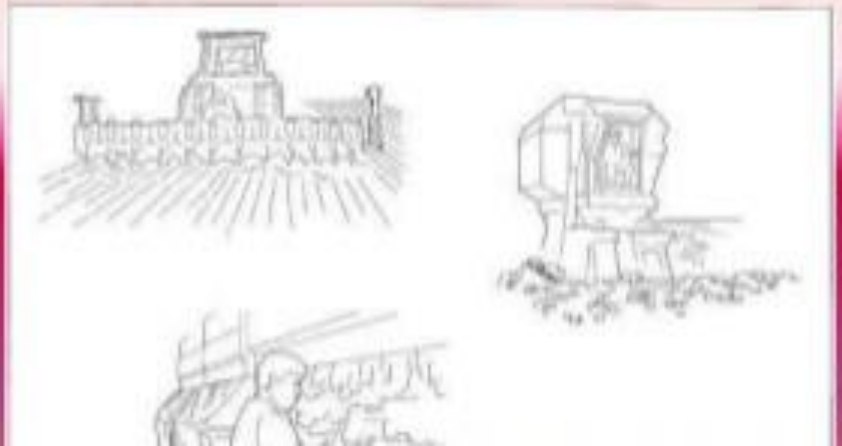
ANIMAL FIBRES

The common animal fibers are wool and silk.

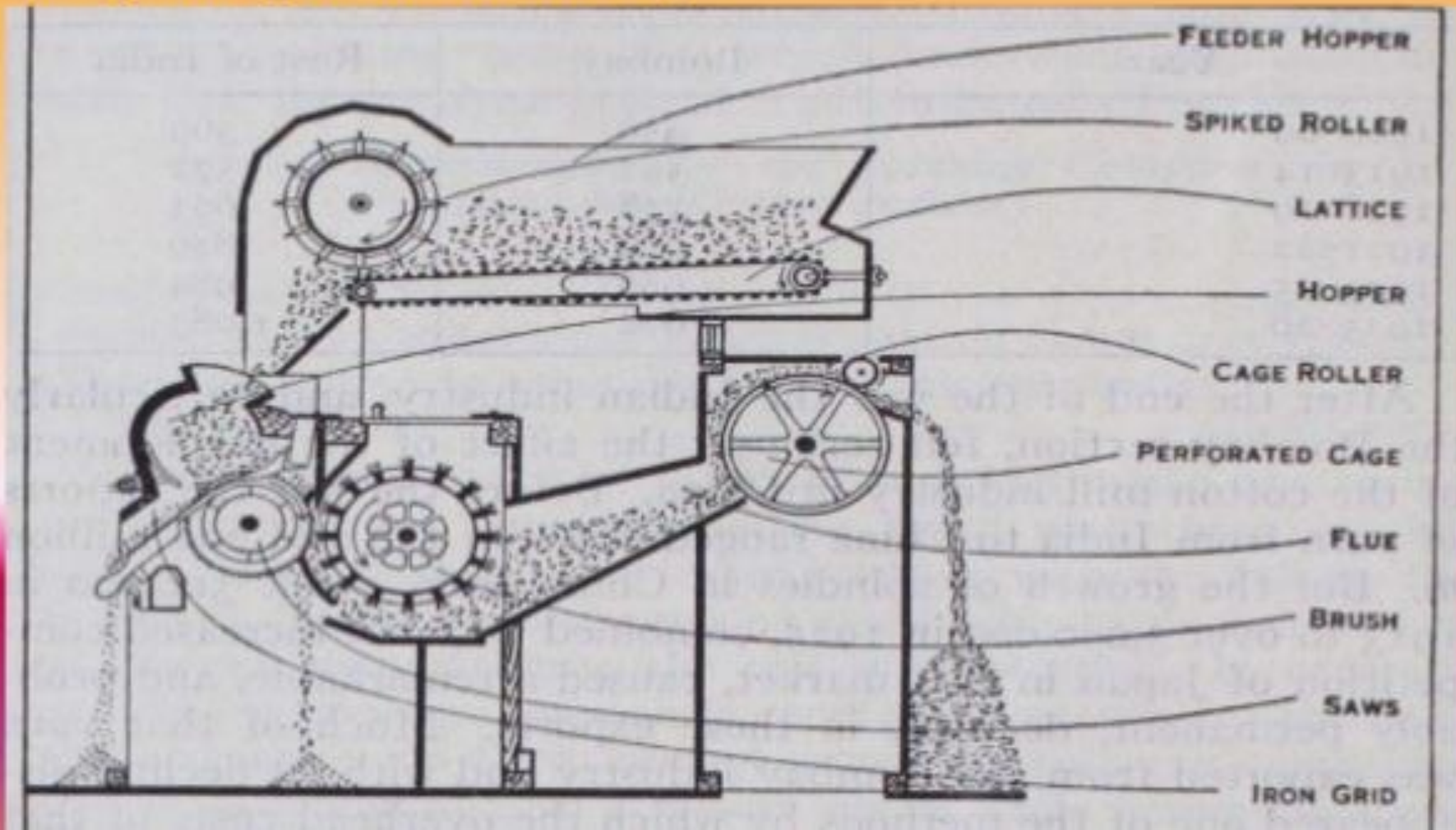
- Wool is obtained from sheep, goat, yak, camel, llama, alpaca etc.
- Silk is obtained from silk worm.

Process of Making Cotton: From field to fabric

The process of making cotton transforms the raw fibers into threads, yarn and fabric in three steps: **Preparation, Spinning, and Weaving.**



Preparation: To be used for thread or fabric, raw seed cotton must cleaned and free of debris. Seeds, burrs, dirt, stems and leaf material are removed from the cotton during **ginning** (The process of separating cotton from seed).



Spinning

A Yarn is usually of substantial length & of small cross section. In the cross section of a yarn there are usually a multiple number of Staple fibers (short fibers) or Filaments (long fibers) of unlimited length.

Yarn made out of Staple fiber is known as Spun Yarn, because the staple fibers should undergo number of process stages so that a yarn can be made out of them. This procedure or process stages in correct sequence is called **"Spinning".**

Weaving

Weaving is a method of textile production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. Other methods are knitting, crocheting, felting, and braiding or plaiting. The longitudinal threads are called the warp and the lateral threads are the weft or filling.

SLIK

Silk is a natural protein fiber, some forms of which can be woven into textiles. The protein fiber of silk is composed mainly of fibroin and is produced by certain insect larvae to form **cocoons.**

There are different types of silk worm produce different silks in terms of luster and textile. Example: **tassar silk, mooga silk, kosa silk** etc. are produced by different types of silk moth. Mulbery silk is the most common silk moth.

DIFFERENT TYPES OF SILK WORMS IN INDIA

- Mulberry silk

- Eri silk

- Tasar silk

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4

Sorting Materials into Groups

Material Grouping

- **Material:** - The matter of which an object is made is called material. E.g. glass, steel, wood etc.
- **Classification**:- the process of sorting and grouping things according to some basic is called classification. Object can be classified on different basis. i.e. shape, material used, uses etc.
- **Basis of grouping**:- Material can be grouped on the basis of similarity and differences in their property. Different types of material have different properties such as appearance, solubility, transparency, conductivity and behavior towards magnet etc.

Properties of materials

1. Appearance
2. Hardness
3. Soluble & Insoluble
4. Transparency
   a) Opaque
   b) Translucent

APPEARANCE

- Materials that have lustre are usually metals
  examples- Iron, copper, aluminium, gold are examples of metals
- Materials like paper, cardboard, wood etc. do not have lustre.

HARDNESS

- Materials which can be compressed or scratched easily are called soft.

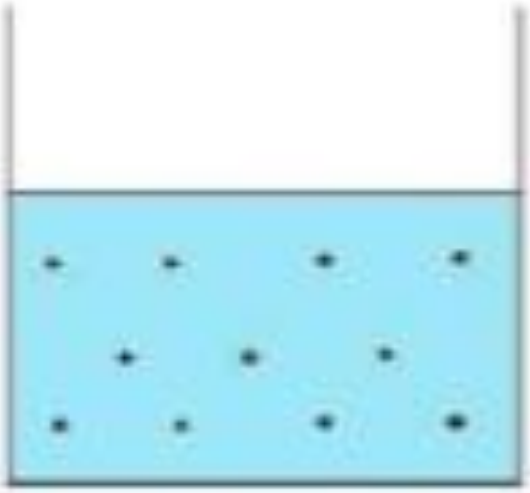
  Example- Iron

- Materials which are difficult to compress are called hard.

  Example- cotton or sponge

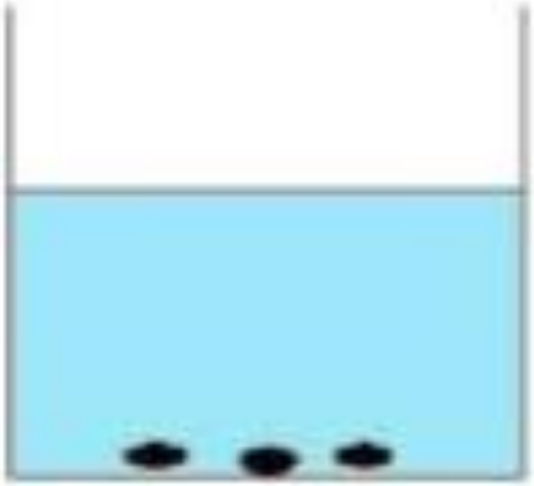
SOLUBLE AND INSOLUBLE

SOLUBLE



The substance will dissolve in a liquid

INSOLUBLE



The substance will NOT dissolve in a liquid and formed precipitate

SOLUBLE

Some substances have completely disappeared or dissolved in water. Such substances are called soluble substances.

INSOLUBLE

Other substances do not mix with water and do not disappear even after we stir for a long time. These substances are insoluble in water.

TRANSPARENCY

TRANSPARENT

Those substances or materials through which things can be seen are called transparent.

Example: Glass,water, air,some plastics

OPAQUE

There are some materials through which we are not able to see. These materials are called opaque. Example: wood, cardboard,metals.

TRANSLUCENT

The materials through which objects can be seen but not clearly are known as translucent. Example- Oil patch on paper.

Recapitulation

- Asking them question related to the topic or make them to solve the worksheet.
- Recapitulation of topic.
- Oral drilling of key terms.

Weekly Test

- Key terms
- Define the terms
- Answer in one word
- Answer in one sentences
- Answer in brief

Remedial

- Additional Measure taken for slow learner
- Extra class can be conducted.
- Give them more general example to understanding.
- Again show them video and boost them to do well


Thank
You!