

# Study Material

Downloaded from Vedantu

## About Vedantu

Vedantu is India's largest **LIVE online teaching platform** with best teachers from across the country.

Vedantu offers Live Interactive Classes for **JEE, NEET, KVPY, NTSE, Olympiads, CBSE, ICSE, IGCSE, IB & State Boards** for Students Studying in **6-12th Grades** and Droppers.

FREE LIVE ONLINE

### MASTER CLASSES

FREE Webinars by Expert Teachers



Register for FREE

## Awesome Master Teachers



**Anand Prakash**  
B.Tech, IIT Roorkee  
Co-Founder, Vedantu



**Pulkit Jain**  
B.Tech, IIT Roorkee  
Co-Founder, Vedantu



**Vamsi Krishna**  
B.Tech, IIT Bombay  
Co-Founder, Vedantu



“My mentor is approachable and **guides me in my future aspirations as well.**”

Student - **Ayushi**



“My son loves the sessions and **I can already see the change.**”

Parent - **Sreelatha**



**10,04,600+**  
Hours of LIVE Learning



**9,49,900+**  
Happy Students



**95%**  
Top Results

**95%** Students of Regular Tuitions on Vedantu scored above **90%** in exams!

Vedantu

## FREE MASTER CLASS SERIES

- ✓ For **Grades 6-12th** targeting **JEE, CBSE, ICSE** & much more
- ✓ **Free 60 Minutes Live Interactive** classes everyday
- ✓ Learn from the **Master Teachers** - India's best

Register for **FREE**

Limited Seats!

# Download Vedantu's App & Get



All Study Material  
with Solution



LIVE  
Doubt Solving



Daily  
LIVE Classes



FREE Tests and  
Reports



GET IT ON  
**Google Play**

**DOWNLOAD THE APP**

**CBSE Class: 08**

**Revision Notes**

**Chapter – 3**

### **Synthetic Fibres and Plastics**

- All synthetic fibres are man-made fibres that are prepared by a number of processes using raw material of petroleum origin, called petrochemicals. Synthetic fibres consists of many small units or monomers combine to form a larger unit called a polymer.
- While natural fibres are obtained from plants and animals, synthetic fibres are obtained by chemical processing of petrochemicals. Like natural fibres, these fibres can also be woven into fabrics.
- Synthetic fibres find uses ranging from many household articles like ropes, buckets, furniture, containers, etc. to highly specialized uses in aircrafts, ships, spacecrafts, healthcare, etc.
- Depending upon the types of chemicals used for manufacturing synthetic fibres, they are named as Rayon, Nylon, Polyester and Acrylic.
- The different types of fibres differ from one another in their strength, water absorbing capacity, nature of burning, cost, durability, etc.

#### **Types of Synthetic Fibres:**

(i) **Rayon:** It is made from cellulose obtained from wood pulp. It is used to make containers, car upholstery, etc.

(ii) **Nylon:** A polyamide made from petroleum. It is lightweight, strong and durable. The fabric allows easy evaporation and dries quickly. It is used in parachutes, flak vest, combat uniforms, tires, etc.

(iii) **Polyester:** A versatile and important man-made fabric. It has an outstanding characteristic of resisting wrinkle and springing back into its crisp, smooth shape. It is strong and soft. It is used in dresses, suits, rainwear, etc.

(iv) **Acrylic:** A fibre similar to that of wool and is used to make sweater, blankets, shawls, etc. It is lightweight, soft and warm. Also it is cheaper than natural wool. It is resistant to chemicals, moths and sunlight. Therefore, they are widely in use nowadays

# Vedantu

## Study Materials

[NCERT Solutions for Class 6 to 12 \(Math & Science\)](#)

[Revision Notes for Class 6 to 12 \(Math & Science\)](#)

[RD Sharma Solutions for Class 6 to 12 Mathematics](#)

[RS Aggarwal Solutions for Class 6, 7 & 10 Mathematics](#)

[Important Questions for Class 6 to 12 \(Math & Science\)](#)

[CBSE Sample Papers for Class 9, 10 & 12 \(Math & Science\)](#)

[Important Formula for Class 6 to 12 Math](#)

[CBSE Syllabus for Class 6 to 12](#)

[Lakhmir Singh Solutions for Class 9 & 10](#)

[Previous Year Question Paper](#)

[CBSE Class 12 Previous Year Question Paper](#)

[CBSE Class 10 Previous Year Question Paper](#)

[JEE Main & Advanced Question Paper](#)

[NEET Previous Year Question Paper](#)

**Plastics:** Like synthetic fibres, plastic is also a polymer. Some plastics have a linear arrangement of the units and some have a cross-linked arrangement of the units. Examples: Polythene. Today, life without plastics cannot be imagined. Be it home, or outside, plastic is every where.

### **Characteristics of Plastics:**

(i) **Non-reactive:** Not affected by air, water, soil, etc.

(ii) **Light, strong and durable:** Light, strong and durable and can be moulded into different shapes and sizes.

(iii) **Poor Conductors:** Do not allow heat and electricity to flow through them.

· The waste created by plastics is not environment friendly. On burning plastics release poisonous gases. On dumping in the ground they may take years to degenerate. This is because of their non-biodegradable nature.· We need to use synthetic fibres and plastics in such a manner that we can enjoy their good qualities and at the same time minimise the environmental hazards for the living communities.· · ·

· **Effect of Plastics on Environment:** Natural materials like wood and paper are biodegradable (bio = living; degradable = able to broken down). In contrast, most plastics do not decay, therefore, they are non-biodegradable. The lightweight nature of plastics can also be a problem. Burning of plastics also release poisonous fumes into the atmosphere. This way plastics pollute the environment.



**Thank You**  
for downloading the PDF

**FREE** LIVE ONLINE

# MASTER CLASSES

FREE Webinars by Expert Teachers



Vedantu

## FREE MASTER CLASS SERIES

- ✓ For **Grades 6-12th** targeting **JEE, CBSE, ICSE** & much more
- ✓ **Free 60 Minutes Live Interactive** classes everyday
- ✓ Learn from the **Master Teachers** - India's best

Register for **FREE**

Limited Seats!