# Grade 8 Synthetic Fibres and Plastics Worksheets

**A. Answer the following questions in short:**

1. Explain why some fibres are called synthetic.
2. Give examples which indicate that nylon fibres are very strong.
3. Explain why plastic containers are favoured for storing food.
4. Explain the difference between thermoplastic and thermosetting plastics.
5. Explain why the following are made of thermosetting plastics:
(a) Saucepan handles
(b) Electric plugs/switches/plug boards
6. Categorise the materials of the following products into ‘can be recycled’ and ‘cannot be recycled’:
Telephone instruments, plastic toys, cooker handle, carry bags, ball point pens, plastic bowls, plastic covering on electrical wires, plastic chairs, electrical switches.
7. Rana wants to buy shirts for summer. Should he buy cotton shirts or shirts made from synthetic material? Advise Rana, giving your reason.
8. Give examples to show that plastics are non-corrosive in nature.
9. Should the handle and bristles of a tooth brush be made of the same material? Explain your answer.
10. ‘Avoid plastics as far as possible’. Comment on this advice.
11. ‘Manufacturing synthetic fibres is actually helping conservation of forests.’ Comment.
12. Describe an activity to show that thermoplastic is a poor conductor of electricity.
13. Define natural fibres.
14. Manufacturing synthetic fibres is actually helping conservation of forests. Comment
15. Meetu is wearing a cotton suit and Ritu is wearing a nylon suit. On their way back home from the office, it starts raining. Can you identify that whose clothes will get dry earlier and why?

**B. Tick (✓) the correct option:**

1. Rayon is different from synthetic fibres because:
(a) it has silk-like appearance
(b) it is obtained from wood pulp
(c) its fibres can also be woven like those of natural fibres
(d) all of the above

2. Nylon is a polymer which is termed as:
(a) polyamide

(b) polyester
(c) polyamine
(d) polyvinyl

3. Which of the following is a polymer of tetrafluoroethene?
(a) PVC
(b) Teflon
(c) Bakelite
(d) Nylon

4. Which of the following is a thermosetting plastic?
(a) PVC
(b) Teflon
(c) Bakelite
(d) Nylon

**C. Fill in the blanks:**
1. Synthetic fibres are also called …….. or …….. fibres.
2. Synthetic fibres are synthesised from raw material called …… .
3. Like synthetic fibres, plastic is also a …… .
4. All polymers/plastics are …… .
5. Polymer of vinyl chloride is …… .

**D. Match the following:**

| 'A' | 'B' |
|---|---|
| 1. Polyester | a. Prepared by using wood pulp |
| 2. Teflon | b. Used for making parachutes and stockings |
| 3. Rayon | c. Used to make non-stick cookwares |
| 4. Nylon | d. Fabrics do not wrinkle easily |

**E. State True or False:**
1. Rayon is made from used cellulose. …….
2. Plastics are non-biodegradable. ……
3. Wool is a natural fibre obtained from plants. ……..
4. Cotton polyester blends are more comfortable during hot/humid weather. ……..

**F. Have you heard of the campaign: "Say No To Plastics". Coin a few more slogans of this kind.**
**G. Fibres are also used for making a large variety of household articles. Make a list of some common articles made from fibres. Try to separate**

**them into those made from natural fibres and those made from artificial fibres. Make entries in the table given below:**

| S.No. | Name of Article | Type of Fibre (Natural/Artificial) |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

**H. Complete the table given below. One has been done for you:**

| Type of Waste | Approximate Time take to Degenerate | Nature of Material |
|---|---|---|
| Peels of vegetable and fruits, leftover foodstuff, etc. | 1 to 2 weeks | Biodegradable |
| Paper | | |
| Cotton cloth | | |
| Wood | | |
| Woollen clothes | | |
| Tin, aluminium and other metal cans | | |
| Plastic bags | | |