## VIDYA BHAWAN BALIKA VIDYAPEETH

## STUDY MATERIAL SCIENCE CLASS-VIII

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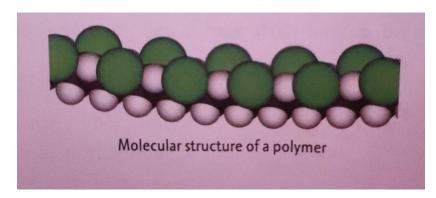
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## Microorganisms : Friends & Foe

Our clothes, furnishings, bedcovers and curtains are made up of fabric. Various types of fibres are used for making fabrics like cotton, silk, wool, polyester and nylon. Out of these, cotton, silk and wool are natural fibres that are obtained from plant and animal sources. Polyester and nylon are not found in nature and are produced artificially in factories using chemicals. These are classified as synthetic or **man-made fibres**.

## Synthetic fibres

All types of fibres are essentially materials called **polymers.** The word polymer comes from two Greek words-poly meaning many and meros meaning part or unit. A polymer is a substance which has a molecular structure built completely from a large number of similar units joined together, like the beads in a necklace.



The natural fibre cotton is a polymer called cellulose in which the single unit is **glucose**.

Synthetic fibres are mostly polymers of chemical units prepared from petrochemicals. Some reconstituted natural fibres are also considered to be synthetic fibres. Presently, synthetic fibres account for about half of all the fibre used in the world in every field of human activity including household and industry. The types of synthetic fibres used include rayon, nylon, polyester, acrylic and many more. The fibres differ from one another in their strength, water absorbing capacity, nature of burning, cost as well as durability.