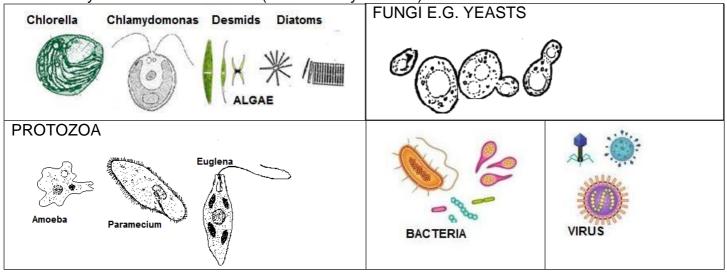
ICSE CLASS 7 BIOLOGY LIFE UNDER A MICROSCOPE

WHAT ARE MICROORGANISMS?

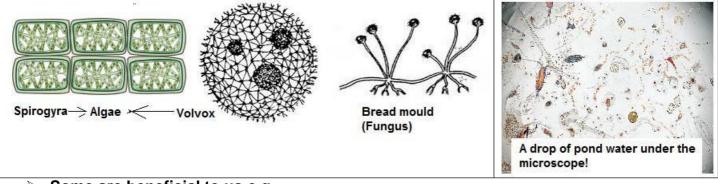
Living organisms that can be seen only through a microscope are called microorganisms. They may be animals or plants!

They generally come under five major categories:

• Many of them are unicellular (made of only one cell)



Some of them are multicellular (made of many cells)



Some are beneficial to us e.g.

- Lactic acid bacteria convert milk to curds
- Yeast ferments sugar syrup into alcohol
- Some bacteria act on animal skin and help in making leather. This is called tanning of hides
- Some bacteria act on fibres and separate them into thin strands. This is called retting of fibre
- Some bacteria act on waste matter and turn them into manure which we can use to grow plants. A gas called methane is formed in this process which we can use as a fuel. Methane is called biogas or gobar gas (when bacteria act on cow dung or gobar, methane is released!)

> Some are harmful to us too!

- Bacteria can cause diseases like typhoid, cholera, TB and diphtheria
- Viruses can cause diseases like AIDS and chicken pox
- Fungi can cause skin infections, nail infections and food poisoning
- Protozoans can cause amoebic dysentery and malaria

WHAT DO THEY NEED TO GROW?

- A suitable medium: this may be water, spoil, dead or decaying organisms
- A suitable temperature: Microorganisms can die when conditions are too hot or too cold. That is why we boil milk and water before drinking and store food in the fridge to prevent spoilage
- Necessary substrate (food to act upon) and sunlight in the case of photosynthetic algae
- Moisture: Moulds grow well in warm and humid conditions