

Structure and Components of Cells - Part 2

Table of Contents

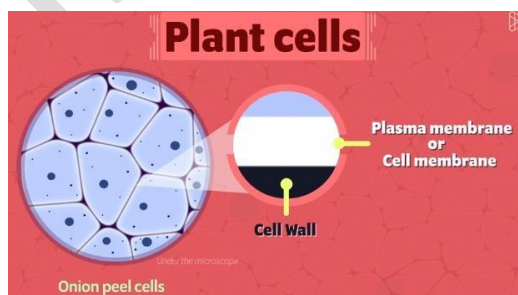
- Structure of a Cell
 - Cell Wall
 - Cell Membrane
 - Cytoplasm
- Summary
- Did You Know?
- What's Next?

In the previous segment of the chapter 'Cell - The Fundamental Unit of Life', we got introduced to **The structure and components of cells**. In this segment, let us learn more about The structure of a cell and its components.

What is the Structure of a cell?

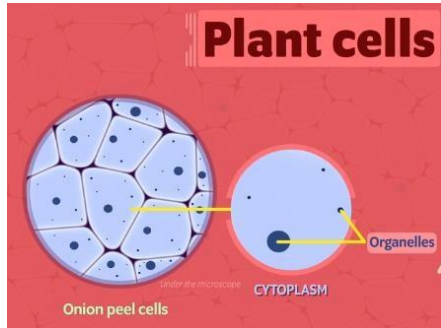
A cell shows various structures under the microscope. It has two protective coverings which act as barriers from the surrounding region. They are:

- **Cell wall**
 - Only plant cells have cell walls, which is a very important structure of the plant cells, while animal cells lack them. It differentiates one cell from the other.
 - It is the outer margin which surrounds the cell.
 - It is composed of a non-living rigid structure that is **Cellulose**. It acts as a protector and gives a proper shape to the plant cells.
 - It also helps in cell-to-cell interactions and provides a barrier to undesirable macromolecules.
- **Cell membrane (Plasma membrane)**
 - All cells have cell membranes.
 - It is porous in nature. Thus, any material can move in and out of this membrane.
 - It is selectively permeable in nature so it allows only specific materials to move across.



- **Cytoplasm**
 - The region inside the cell membrane is called the **Cytoplasm**.

- It is a jelly-like substance filling up the cell space and contains many dot-like structures called the **Organelles**.
- Each organelle performs a different function.



Summary

<p>Parts of the Cell</p>	<ul style="list-style-type: none"> ● Cell wall ● Cell membrane or Plasma membrane ● Cytoplasm ● Organelles
---------------------------------	--

Did you know?

Singer and Nicolson's fluid mosaic model is often used to describe the cell membrane's structure.

What's next?

In our next segment of Class 09 Science, we will learn about **Diffusion**.