

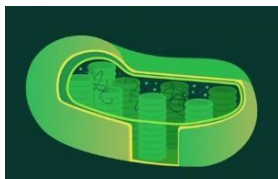
## Plastids

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In the previous segment of the chapter 'Cell - The Fundamental Unit of Life', we learnt about the cell organelle, **Vacuole**. In this segment, let us get acquainted with the next organelle, Plastid.

### What are Plastids?



#### Chloroplast

Plant cells have organelles which act as colour bags called the **Plastids**.

They are organelles found exclusively in plant cells and absent in animal cells.

They are colourful cell organelles which impart colours to the various parts with the help of pigments present in them.

### What are the different types of Plastids?

Plastids are classified based on the coloured pigments they contain. The three major categories are:



#### Chloroplast

- **Chloroplast**
  - It is the principal plastid found in leaves and has a double membrane structure.
  - The outer membrane is protective in nature. The inner membrane encloses within itself a sponge-like matrix called the **Stroma**.
  - The most important component of the chloroplast is its own DNA and ribosomes which help it to replicate on its own.
  - The stack-like structures present in the Chloroplast are called the **Grana** (Singular granum) which are made up of numerous discs called **Thylakoids**.

○ Each thylakoid contains the coloured pigments called the **Chlorophyll pigments** which are necessary for photosynthesis.

- **Chromoplast**

- They are heterogeneous organelles which are different in every cell.
- They contain different coloured pigments which impart attractive colours to flowers and fruits.

- **Leucoplast**

- They are colourless organelles which act as bulk storage organelles.
- They store a large amount of starch, other sugars, proteins, and lipids.
- Cells of roots, bulbs, and other storage organs contain more number of leucoplasts.



**Chromoplasts**

### Summary

<b>Plastids</b>	Plant cells have organelles which act as colour bags called the <b>Plastids</b> .
<b>Types of Plastids</b>	<ul style="list-style-type: none"> <li>● Chloroplast</li> <li>● Chromoplast</li> <li>● Leucoplast</li> </ul>

### What's next?

In our next segment of Class 09 Science, we will learn about **The different types of cells**.