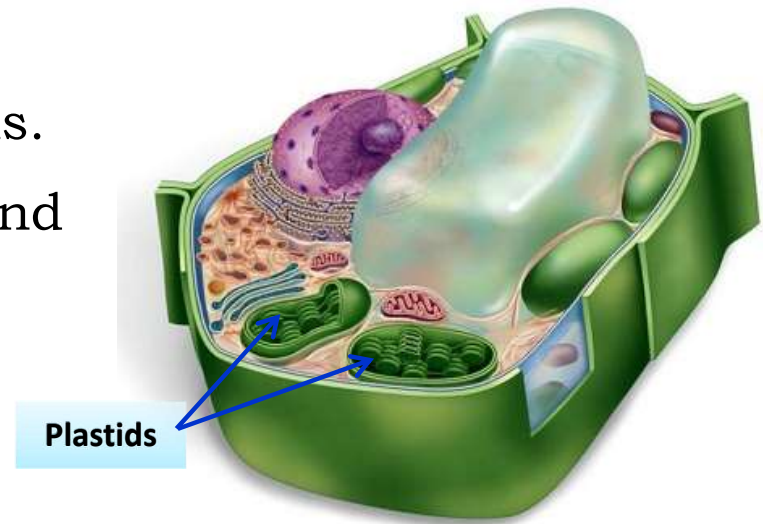


Plastids :

- Plastids are double membrane structures present only in plant cells.
- They give colour to leaves, flowers and fruits.



Plastids

are of two types

Coloured

are called

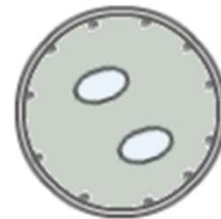
Chromoplasts

Colourless or white

are called

Leucoplasts

- ◆ Chloroplasts are a type of chromoplast which are green in colour due to the presence of a green coloured pigment called chlorophyll.



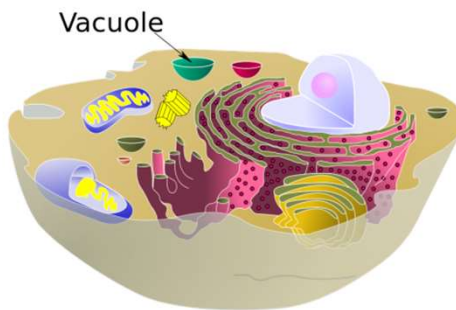
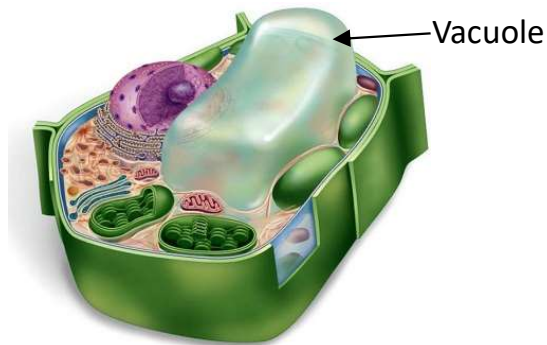
Functions of plastids:

- Chloroplasts help to harness solar energy and convert it into chemical energy in the form of food. Trap
- Chromoplasts give colour to flowers and fruits.
- Leucoplasts are involved in the synthesis and storage of various kinds of food like starch, oils and proteins. Production



Vacuoles :

- Vacuoles are storage sacs for solid or liquid contents.
- Vacuole is bound by a single membrane.
- They do not have any basic shape or size. i.e. one layered
- The structure of the vacuole changes according to the need of the cell.
- Animal cells have few small sized and temporary vacuoles.
- While plant cells have one or more large vacuole.



Functions of vacuoles :

- Vacuoles help to maintain osmotic pressure of the cell.
- They store metabolic byproducts and waste products. E.g. Glycogen, proteins and water.
- They store waste products of various chemical reactions in a cell. E.g. Amoeba.
- In plant cells vacuoles are full of cell sap and provide turgidity and rigidity to them.

Balance of water

Products of various chemical reactions

Firmness

Mixture of water and minerals

Stiffness

Cell sap

