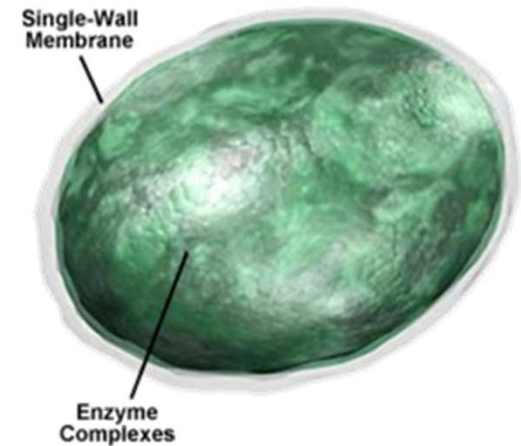


Lysosomes :

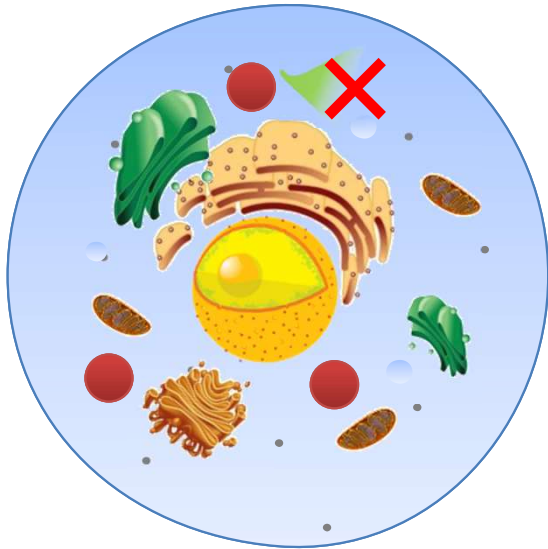
- They are simple, one membrane bound sacs, filled with digestive enzymes.
- These enzymes are made by RER.
- Due to various metabolic activities going on in the cell, organic waste is generated.
- The powerful enzymes are capable of digesting these wastes.
- So lysosomes digest the waste.
- Plant cells have very few lysosomes.

Because generally in most of the plants the waste is stored.



Functions of lysosomes :

- As it is the digestive system of the cell, it protects the cell by destroying any foreign material like bacteria and viruses that invade the cell.



Functions of lysosomes :

- They remove worn out cellular organelles and remove all organic debris.

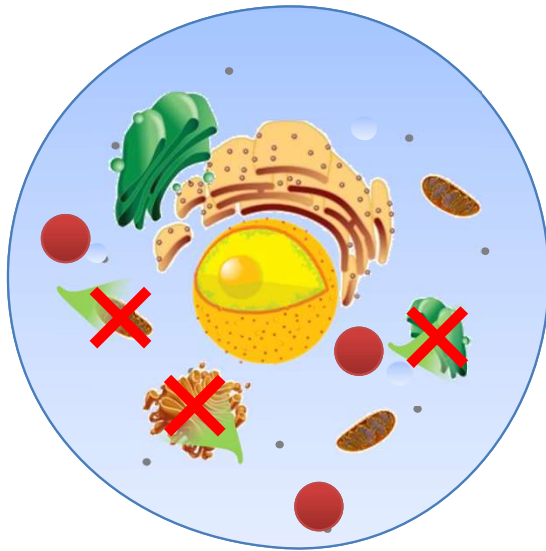
This process is called autolysis.

So they are called as Demolition

Damaged

Waste materials

Self digestion



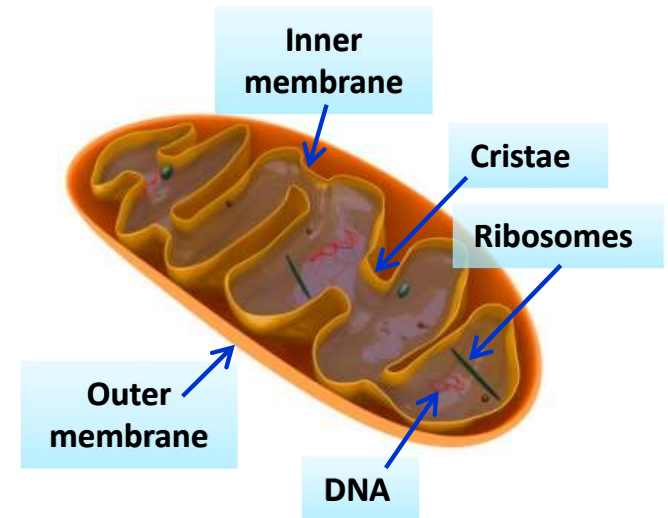
Functions of lysosomes :

- During the disturbance in cellular metabolism, for example, when the cell gets old or damaged, lysosomes burst and the enzymes digest their own cells.
- Therefore lysosomes are also called as 'Suicide Bags'.



Mitochondria :

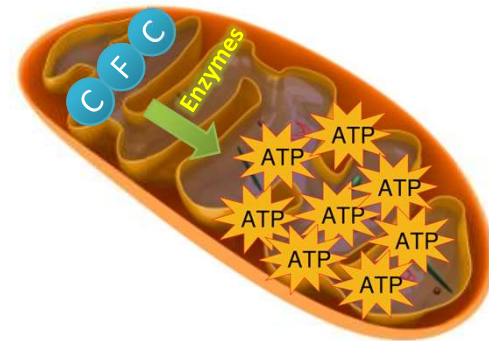
- It is a double membrane structure.
- The outer membrane is porous while the inner membrane is deeply folded.
- The folds are called cristae. They create a larger surface area for efficient functioning.
- The mitochondria have their own DNA and ribosomes.
- Therefore they are capable of making some of their own protein.



Mitochondria :

- Mitochondria oxidise carbohydrates and fats with the help of enzymes to release energy in the form of ATP.

Break down



Functions of mitochondria :

- Mitochondria produce energy in the form of ATP which is a energy currency of the cell. Therefore mitochondria are called as the powerhouse of the cell.
- The body uses this energy to synthesize chemical compounds and to do mechanical work (movement of muscles, production of heat, conduction of nerve impulses, etc).

Useable form of energy

produce

