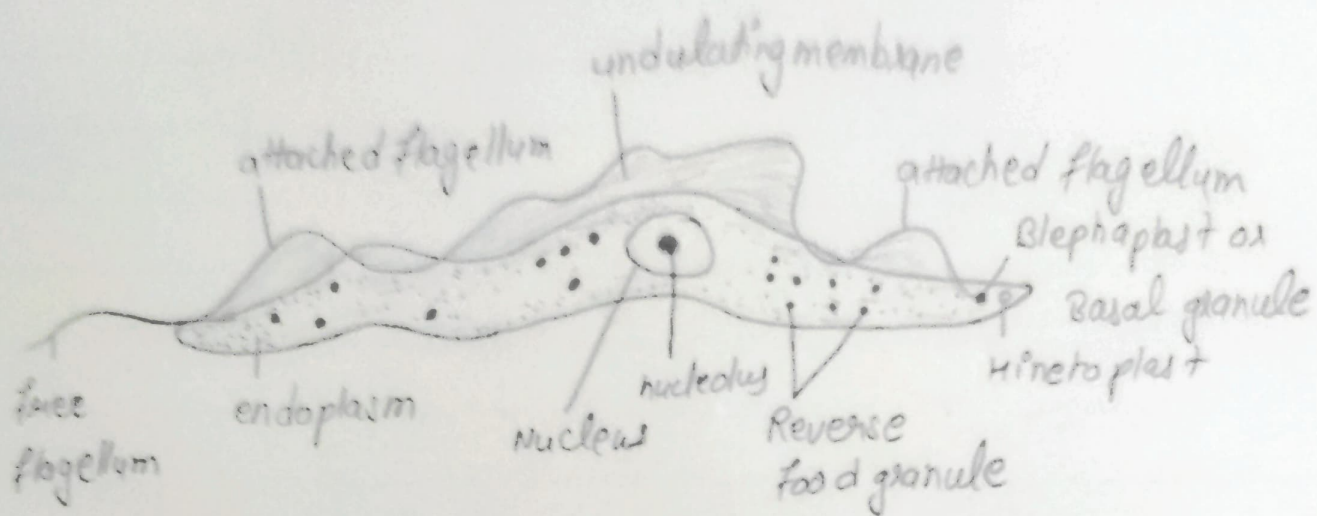
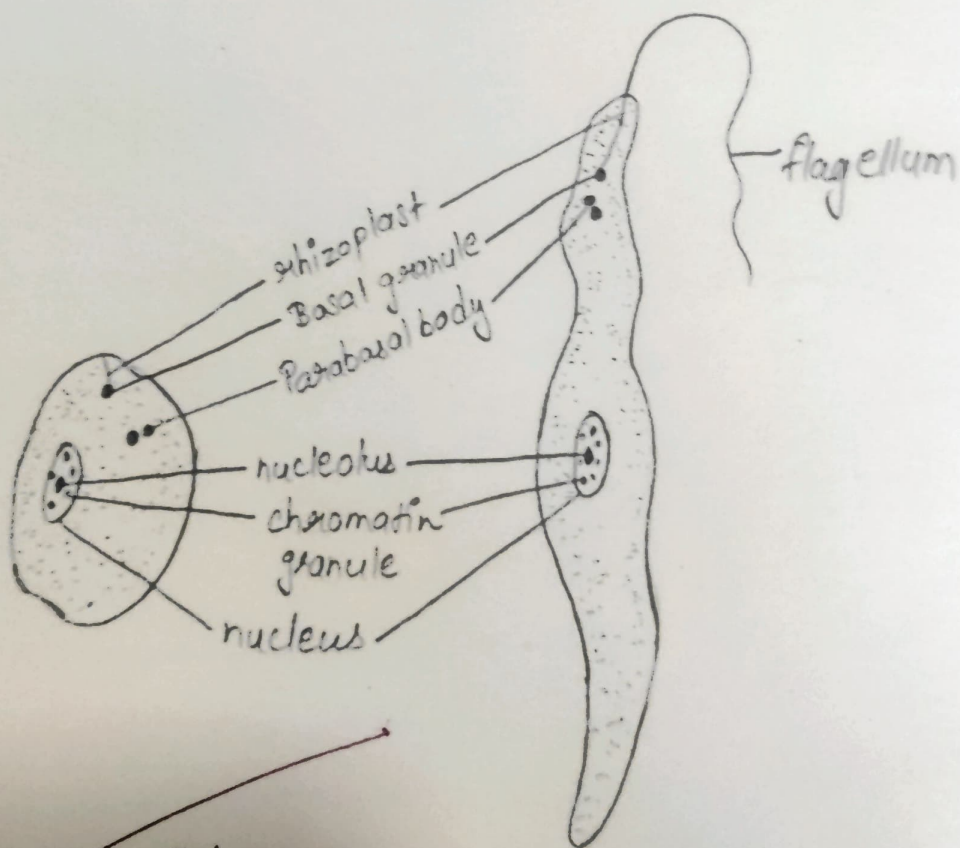




Trypanosoma



Leishmania

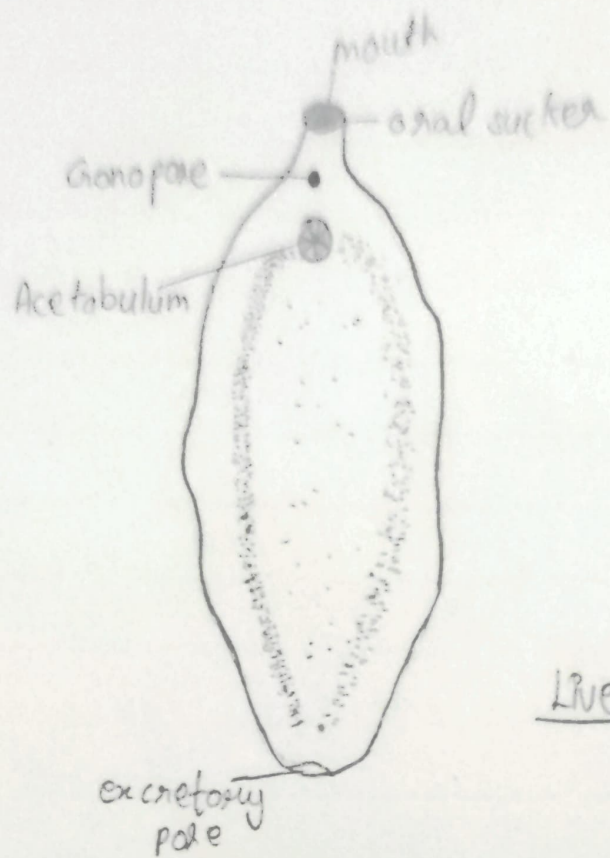
Trypanosoma

: whole mount

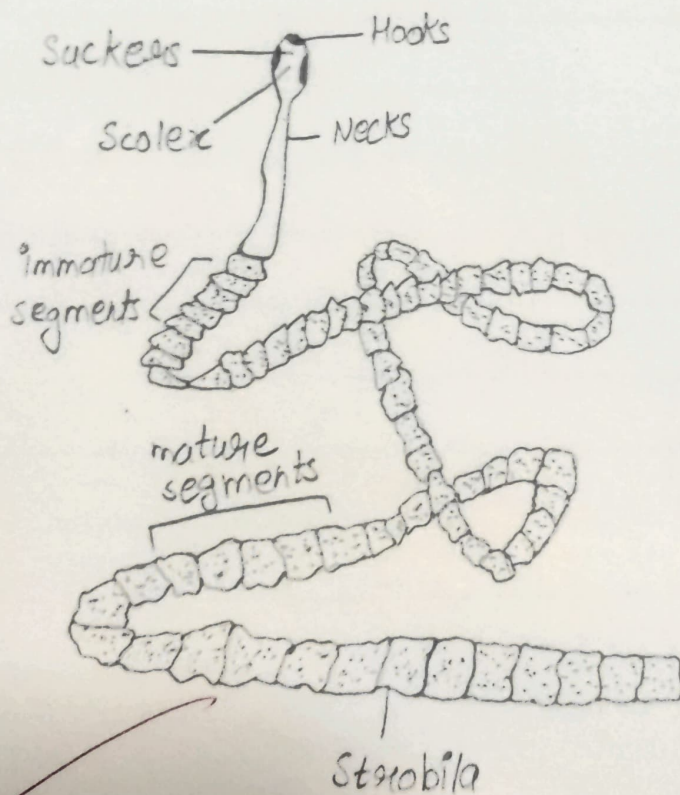
- It is a unicellular, microscopic organism.
- It move with the help of flagella.
- The body is long, narrow & spindle shaped or both end is surrounded by a pellicle.
- The spherical nucleus is located in the centre.
- They are disease causing parasites that feed saprozoically.
- A contractile vacuole is absent.
- An axoneme is attached to blepharoplast at the posterior end.

Leishmania

- It is unicellular, microscopic organism.
- Reproduction occur by binary fission.
- The cytoplasm has an oval nucleus, dot like kinetoplast & a parabasal body.
- The life cycle has two stage.
- 1st Leishmania stage (amastigote).
- 2nd Leptomonad stage (mastigote).
- Leishmania stage is spherical or oval & lives in liver cell.



Liver Fluke



Taenia Solium

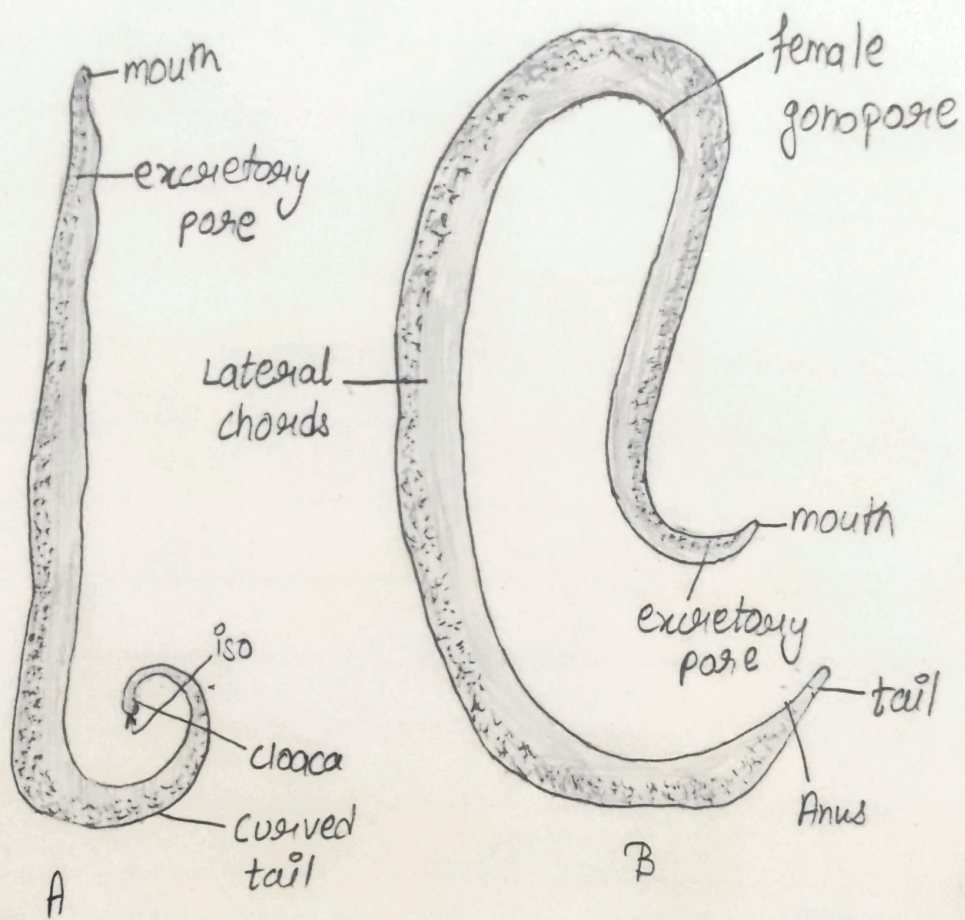
Fasciola hepatica

: Liver Fluke

- Triploblastic, acoelomate animal with organ grade of organization & a dorsoventrally flattened body.
- Two suckers are present anterior & ventral. Both are devoid of hooks & spines.
- It is hermaphrodite & reproduction is sexual.
- It is commonly called liver fluke because it lives within the liver of sheep as a parasite.
- The body is covered with tegument & backwardly directed scales that protect against the host's digestive secretion.

Taenia Solium

- Triploblastic, acoelomate with organ level of organisation.
- The rostellum bears 28-32 curved hooks arranged in two rows.
- The neck is unsegmented & is the budding zone.
- The anterior region contains four suckers with hooks & a rostellum.
- The body is ~~not~~ divided into scolex, neck & strobila.



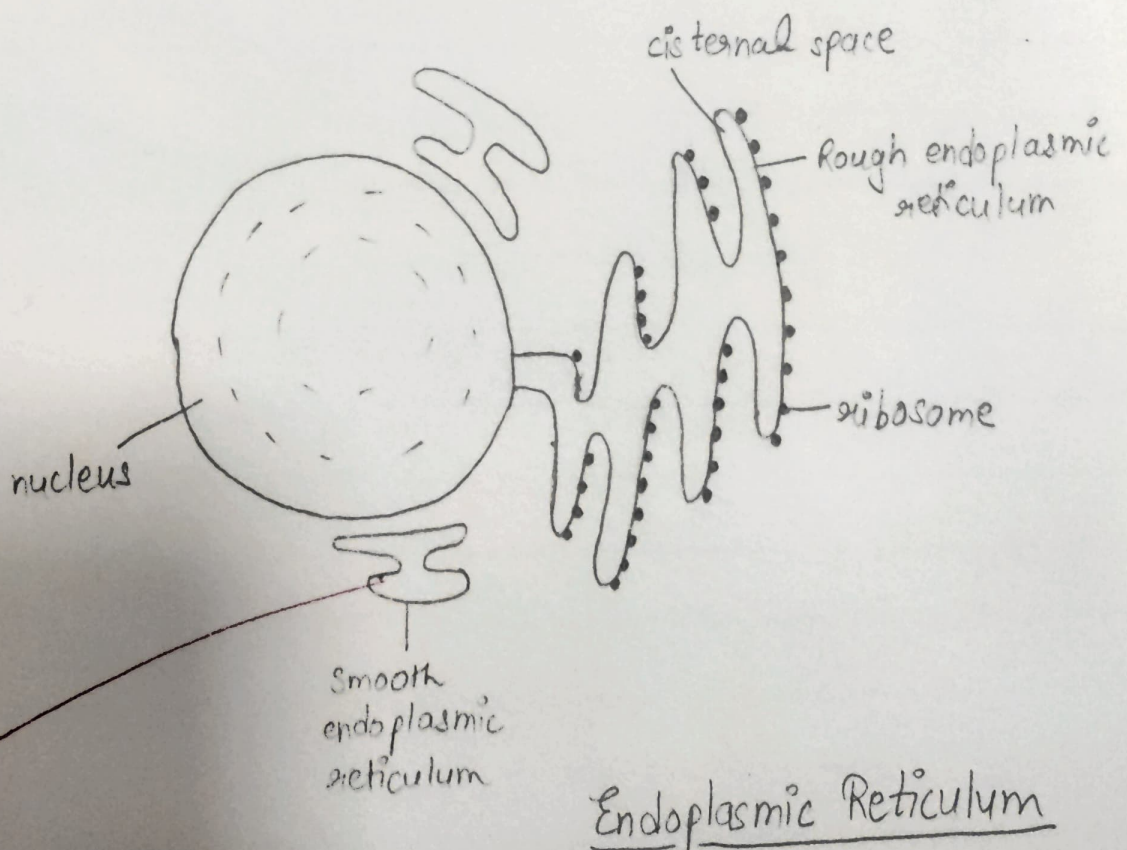
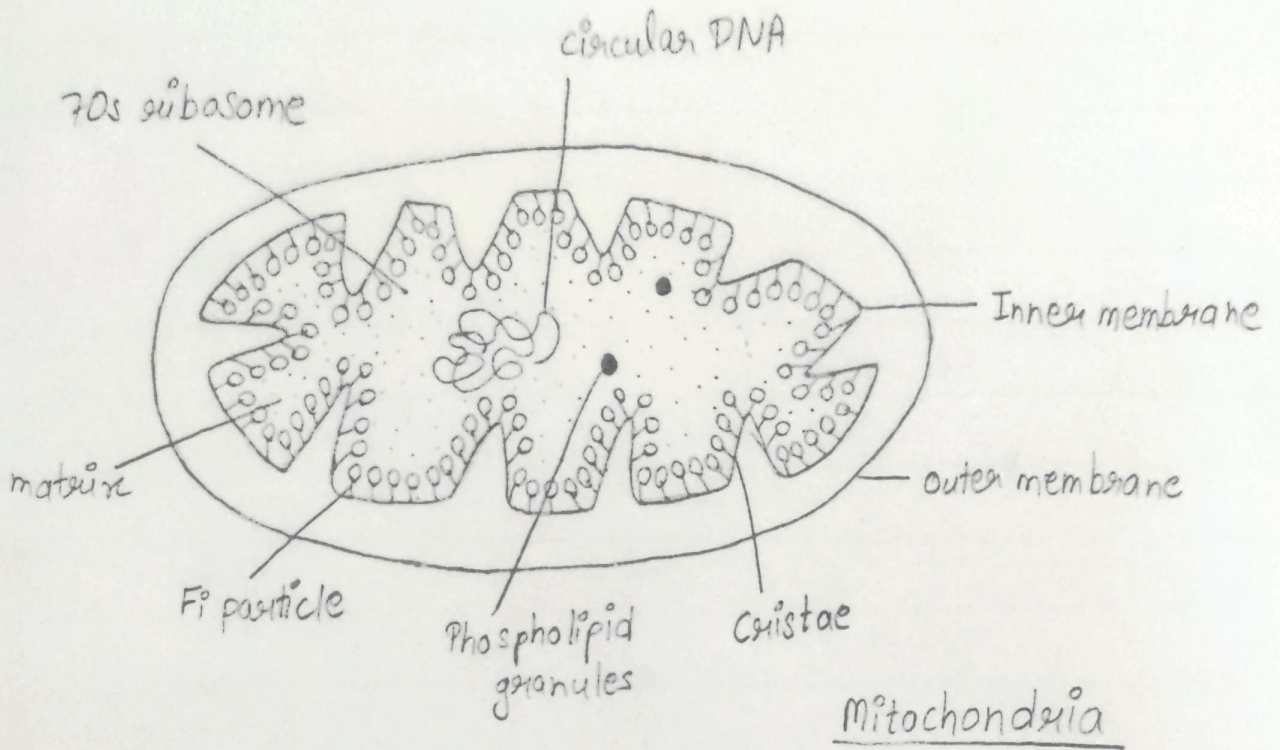
Ascaris

Ascaris

Date 27/sept/25

: Round worm

- Unsegmented, pseudocoelomate animal with organ level system of body organisation.
- The anterior end bears a mouth surrounded by 3 lips one dorsal & two subventral.
- Sexual dimorphism is distinct.
- The male has a ventral curved posterior end, a cloaca & numerous genital papillae.
- The female worm is larger in size. The posterior end is straight. The anal & genital opening are separate in the female.
- It is commonly called roundworm because of its cylindrical body.
- Phylum - Nematode.



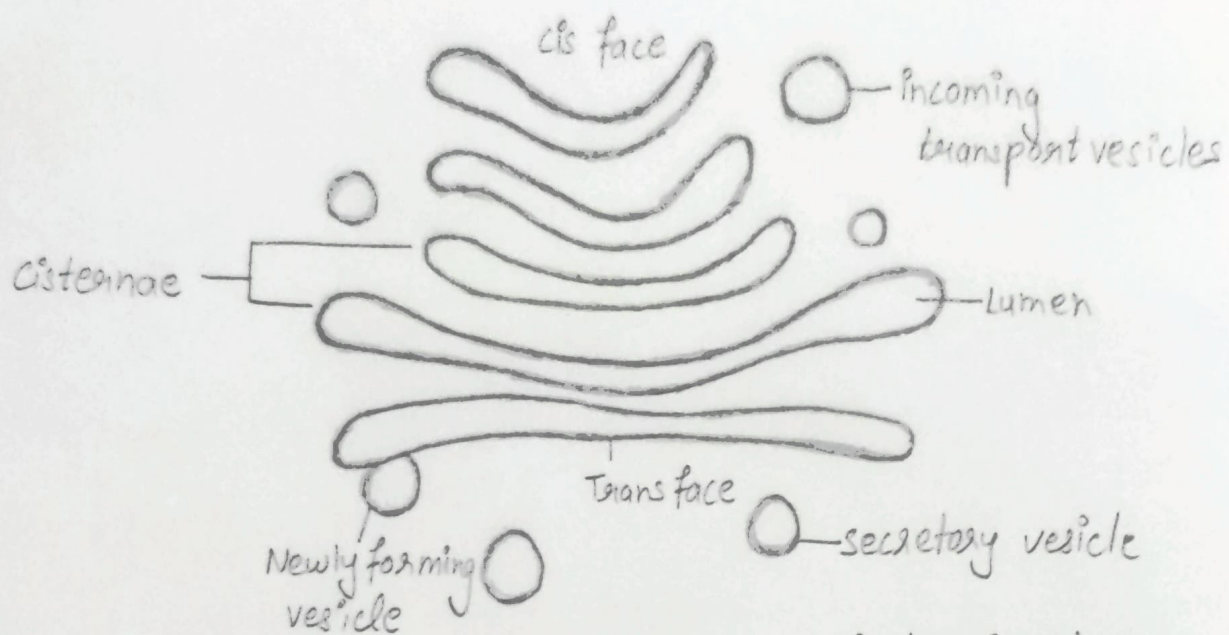
Mitochondria

Date 03/04/25

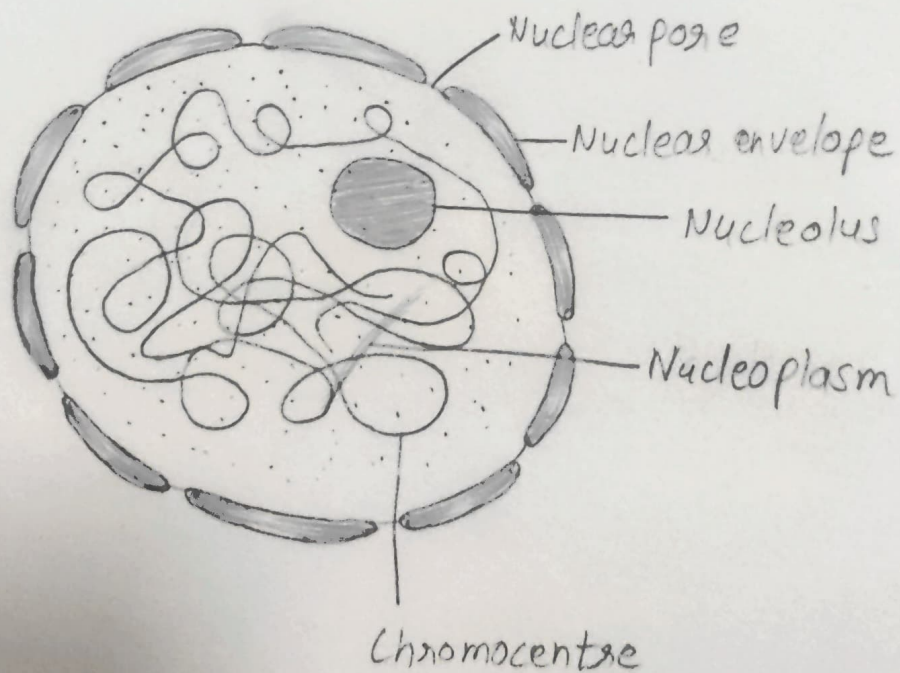
- The discovery of mitochondria in general came in 1886 by the scientist Richard Altman.
- Mitochondria are double membrane bound, energy converting organelles, which are present in all eukaryotic cells.
- Called "Power house of the cell."
- Semi autosomal organelle.
- Mitochondria are derived from bacteria by a process termed as endosymbiosis.
- Mitochondria also produce heat (brown fat).

Endoplasmic Reticulum

- Series of connected flattened sac having several ribosomes on its outer surface.
- It synthesizes & secretes protein in the liver hormones & other substance in the glands.
- Two types of endoplasmic reticulum:
 1. Smooth Endoplasmic Reticulum
 2. Rough Endoplasmic Reticulum
- E.R. play an important role in range of neurological disorders.



Golgi Complex



Nucleus

01/11/25

Golgi Apparatus

Date 03 / Oct / 25

- It is also known as Golgi complex or Golgi body.
- It is discovered by Camilla Golgi.
- Found in all eukaryotic cells, plants as well as animals.
- They are membrane bound organelle present in the cytosol of the cell.
- It receive protein from Endoplasmic Reticulum.
- Its main function is the packaging & secretion of protein.
- It is located in the cytoplasm next to Endoplasmic Reticulum.

Nucleus

- In 1831, Robert Brown discovered the cell nucleus.
- The nucleus is a spherical ~~sp~~ shaped organelle that is present in eukaryotic cell.
- The nucleus is the control centre.
- It regulates cell metabolism by synthesizing various enzymes.
- The nucleus is a site for transcription.
- It is also responsible for the coordination of gene & gene expression.