Reticular structure consisting of many disc-shaped sacs (cisternae), stacked parallel to each • other



- Cisternae have 2 distinct faces -Convex (cis) – forming face Concave (trans) – maturing face *Cis* and *trans* faces are interconnected.
- Notesale.co.uk Function - packaging of materials, either the intracellular targets or to be • secreted outside the cell
- vesicles from ER fuse with the cis face of the golgi Materials to be packa • the form S appar towards
- Glycolipids and glycoproteins are also synthesised in the Golgi apparatus. •
- Lysosomes:
- Lysosomes are vesicles formed as a result of the packaging in the Golgi apparatus. •
- These are rich in all types of hydrolytic enzymes (optimally active at acidic pH), and are • capable of digesting all types of molecules, such as carbohydrates, lipids, proteins and nucleic acid.
- Vacuole:
- Membrane-bound space in cells; containing water, sap, excretory products and other waste • materials
- Vacuole membrane Tonoplast •

- Importance: Mitochondria are called the 'power houses of cells' since they are the site for aerobic respiration, and form ATP (source of cellular energy).
- Matrix contains components like the single circular DNA, RNA, ribosomes (70s) and the components needed for protein synthesis.
- Mitochondria divide by fission.

## Plastids

- Found in plant cells and euglenoids
- Bear pigments and impart colours to plants
- Large-sized, and hence, easily observable



## Chloroplast

- Location: Mesophyll cells in leaves
- Can be variable in shape (oval/spherical/discoid/ribbon-like), variable in length and in number (1 per cell in *Chlamydomonas* to 20–40 per cell in green algae)
- Have *double membrane*: Outer membrane and Inner membrane (less permeable)