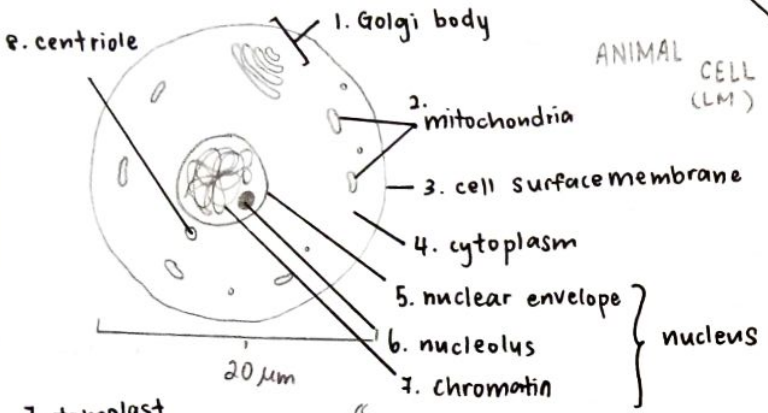
Cell Structure

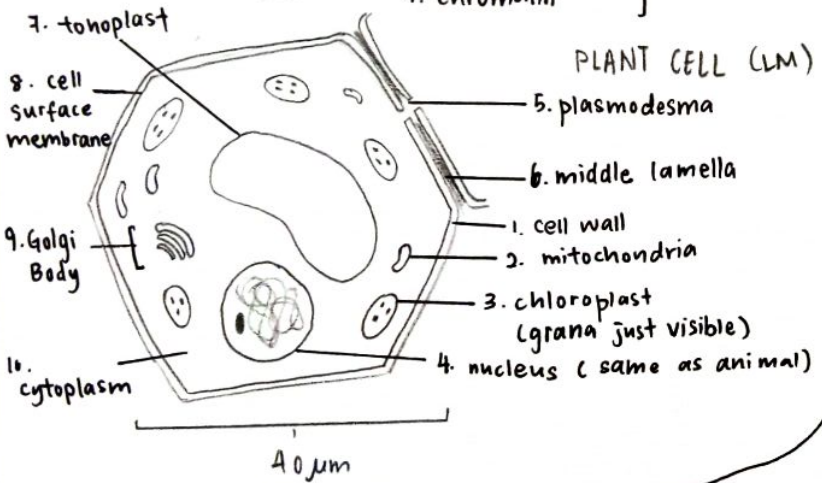
CELL THEORY

→ the basic unit of structure & function of all living organisms is the cell

LIGHT MICROSCOPY

→ magnification x1500
→ resolution 200nm (½ ↑ of visible light)





ELECTRON MICROSCOPY

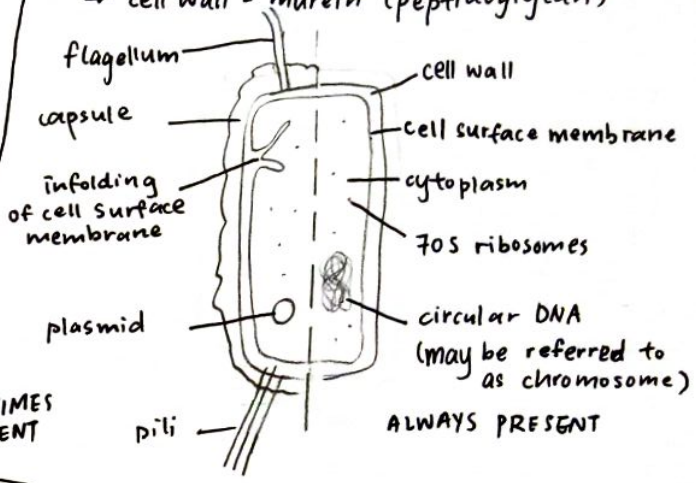
→ magnification x 500,000
→ resolution 0.5nm
→ specimen must be in vacum
→ TEM, SEM
↑ res 3nm - 20nm

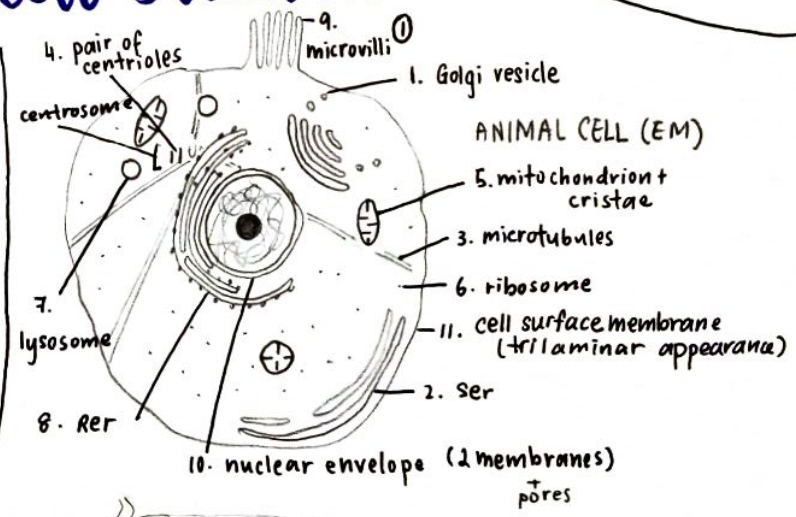
MICROSCOPY

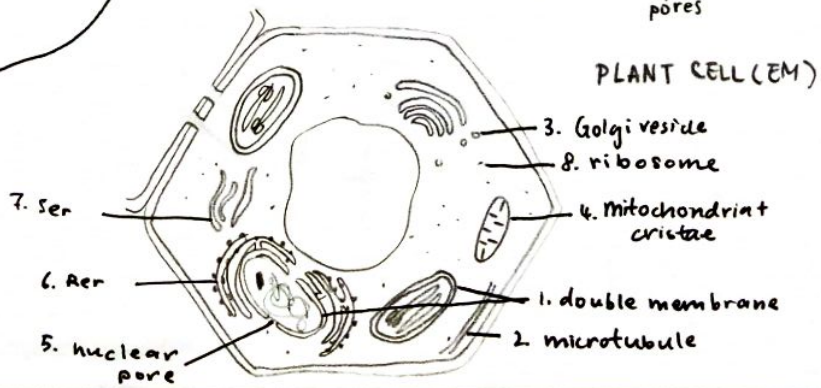
→ magnification ⇒ the number of times larger an image is than the real size of the object
→ resolution ⇒ the ability to distinguish between 2 separate points
→ MEASURING CELLS
→ stage micrometer
↳ in mm
→ eye piece graticule has no units

PROKARYOTIC CELLS

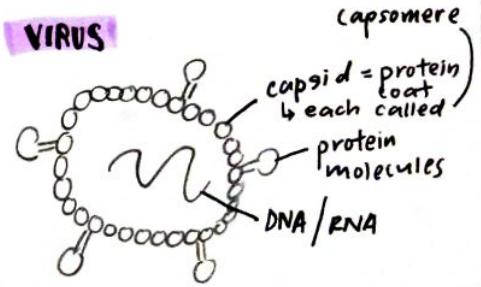
→ 0.5 - 5 µm
→ circular + free DNA
→ naked DNA
→ cell wall = murein (peptidoglycan)







VIRUS



→ no cell structure
→ not free living