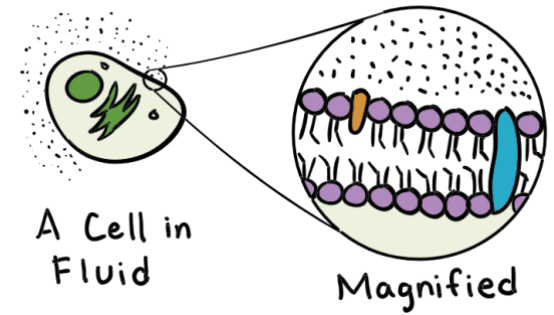


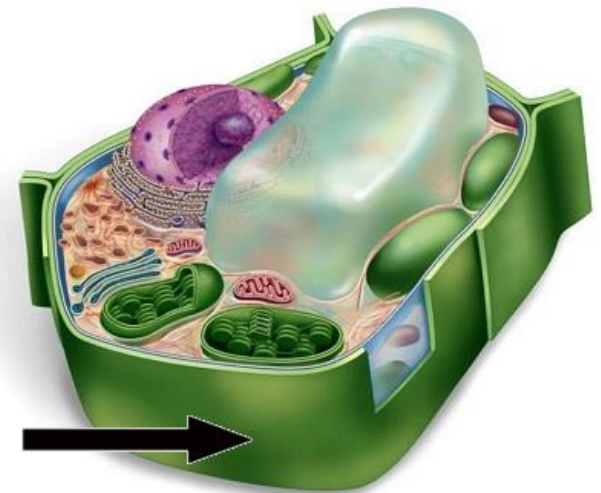
Plasma (cell) Membrane

Forms the boundary of the cell, acts as a selective barrier allowing certain materials to pass but not others



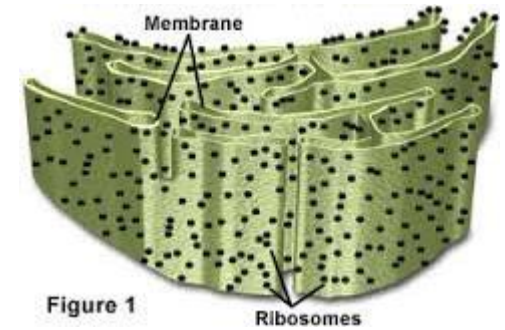
Cell wall

Protective layer external to the cell membrane, consists of cellulose in plants and chitin in fungus. Protects the cell from bursting under turgor pressure.



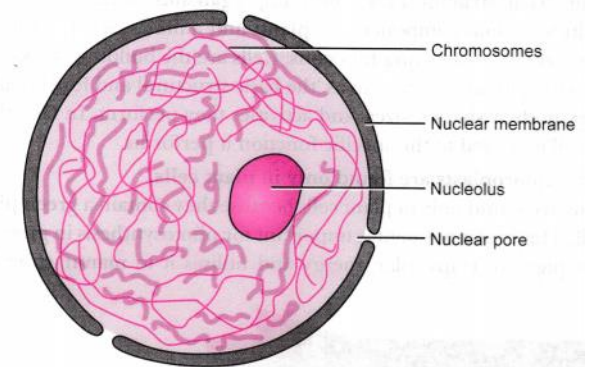
Rough endoplasmic reticulum

Flattened sacs of membrane with attached ribosomes that synthesize proteins. The proteins are packaged into transport vesicles.



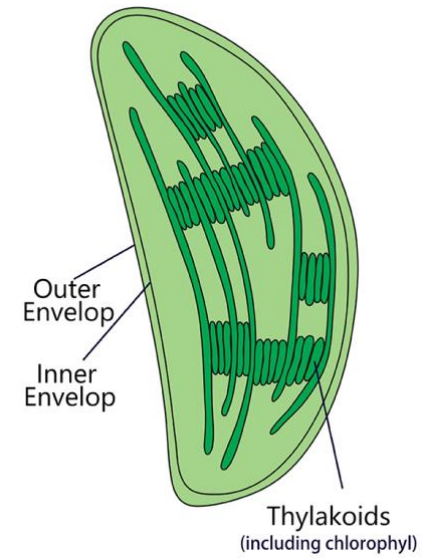
Nucleus

Contains most of the DNA that control the eukaryotic cell. Contains the nucleolus (where ribosomes are made) and chromatin (uncoiled chromosomes).



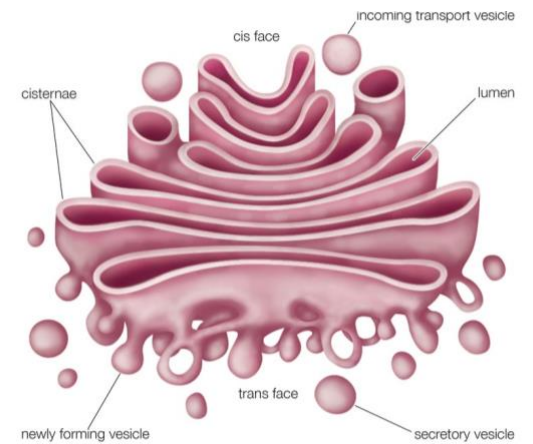
Chloroplast

Site of photosynthesis; produce glucose using light energy, CO₂ and H₂O



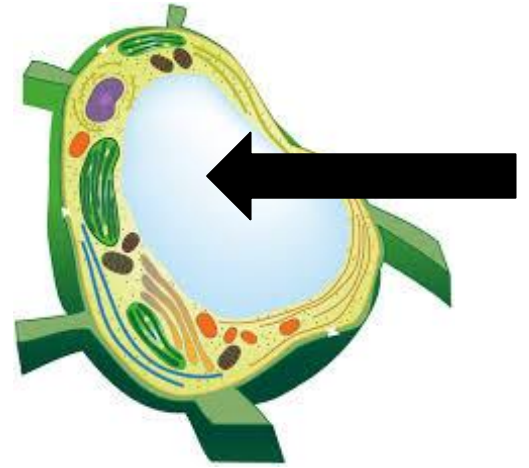
Golgi apparatus

Consists of flattened membranous sacs; receives transport vesicles from the ER, modifies proteins made in the rER and produces secretory vesicles



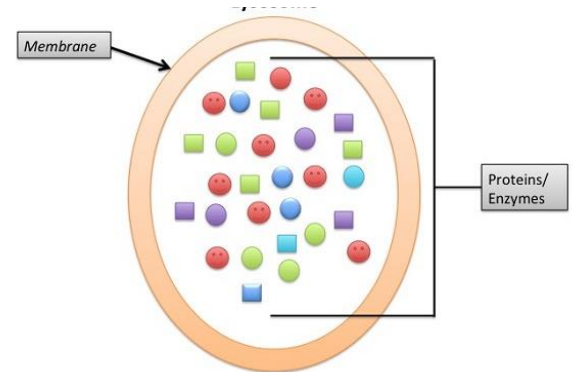
Vacuole

Membrane bound sacs, larger than vesicles, stores water and dissolved nutrients.



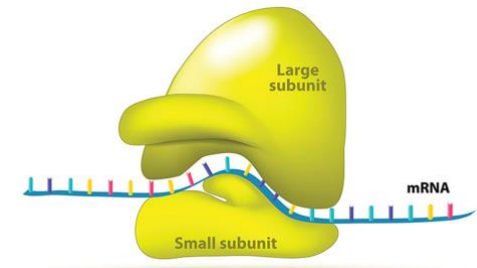
Lysosome

Sacs of digestive enzymes used to digest food and old, worn out cell parts.



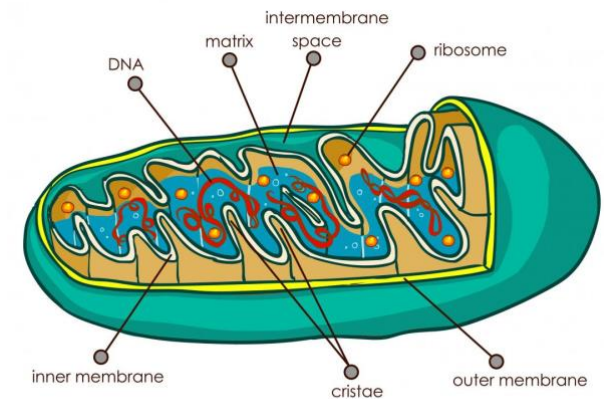
Ribosomes

Site of protein synthesis;
suspended in the cytosol or
attached to the rER.



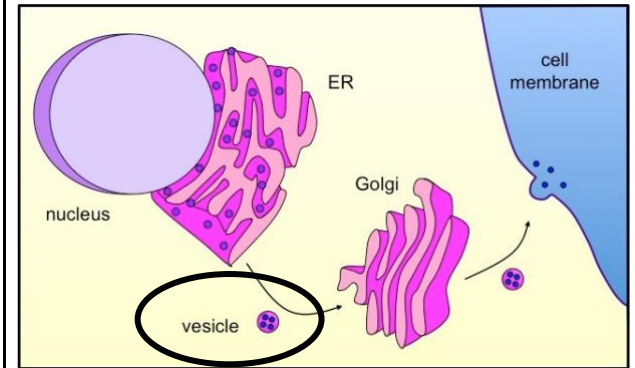
Mitochondria

Site of aerobic cellular
respiration, producing ATP from
glucose.



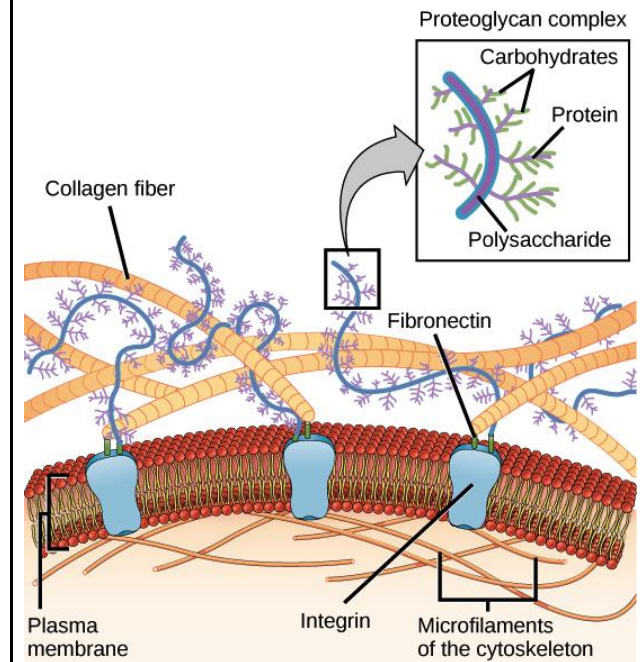
Transport vesicle

Small sac used to carry proteins made on the rER to the Golgi.



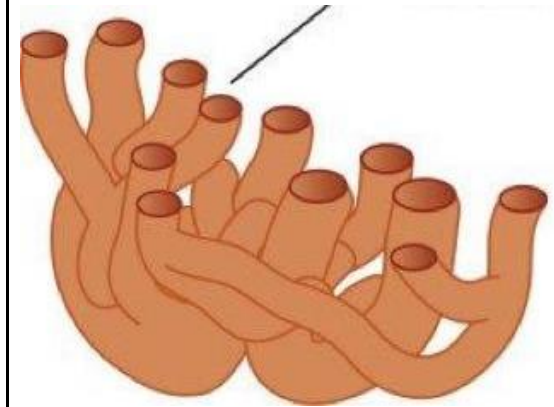
Extracellular matrix

Proteins found outside an animal cell that function in support and adhesion so that the cells can connect together to form a tissue.



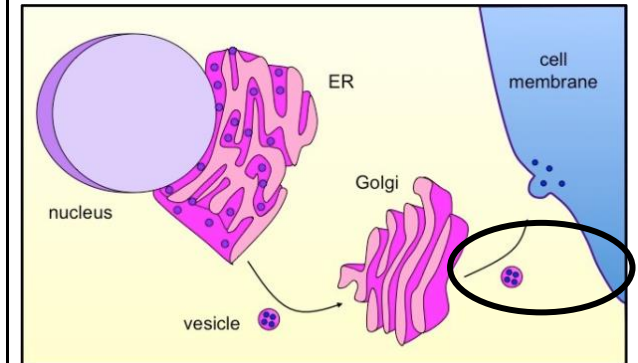
Smooth Endoplasmic reticulum

Flattened sacs of membrane without attached ribosomes. Synthesizes lipids and buds off to form transport vesicles.



Secretory vesicle

Small sac used to carry proteins from the Golgi to the cell membrane for secretion.



Cilia and Flagella

Whip-like structures used for cell locomotion or to create a current next to the cell.

