

2.5.6 State that growth, embryonic development, tissue repair and asexual reproduction involve mitosis

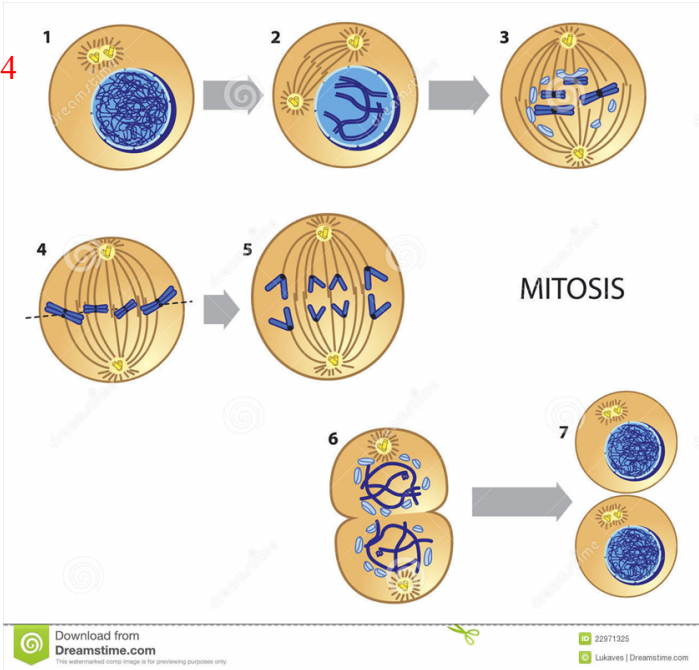
Growth: Multicellular organisms increase their size by increasing their number of cells through mitosis

Asexual reproduction: Certain eukaryotic organisms may reproduce asexually by mitosis (e.g. vegetative reproduction)

Tissue Repair: Damaged tissue can recover by replacing dead or damaged cells

Embryonic development: A fertilized egg (zygote) will undergo mitosis and differentiation in order to develop into an embryo

2.5.4



Membrane Proteins

Transport

Receptors

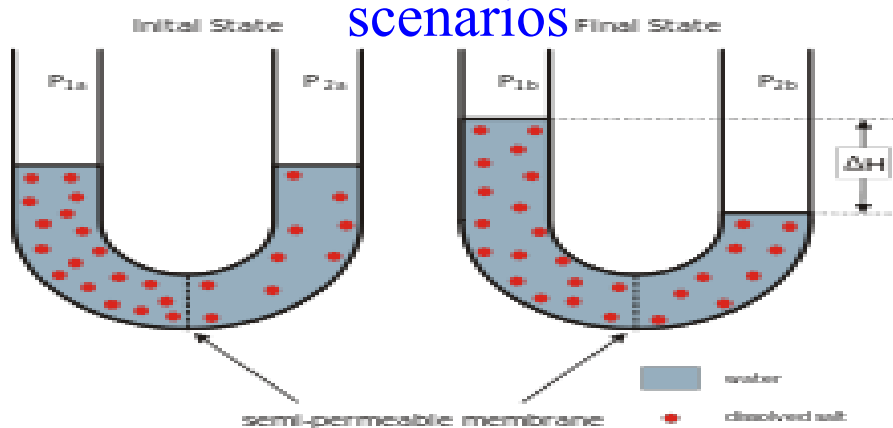
Anchorage

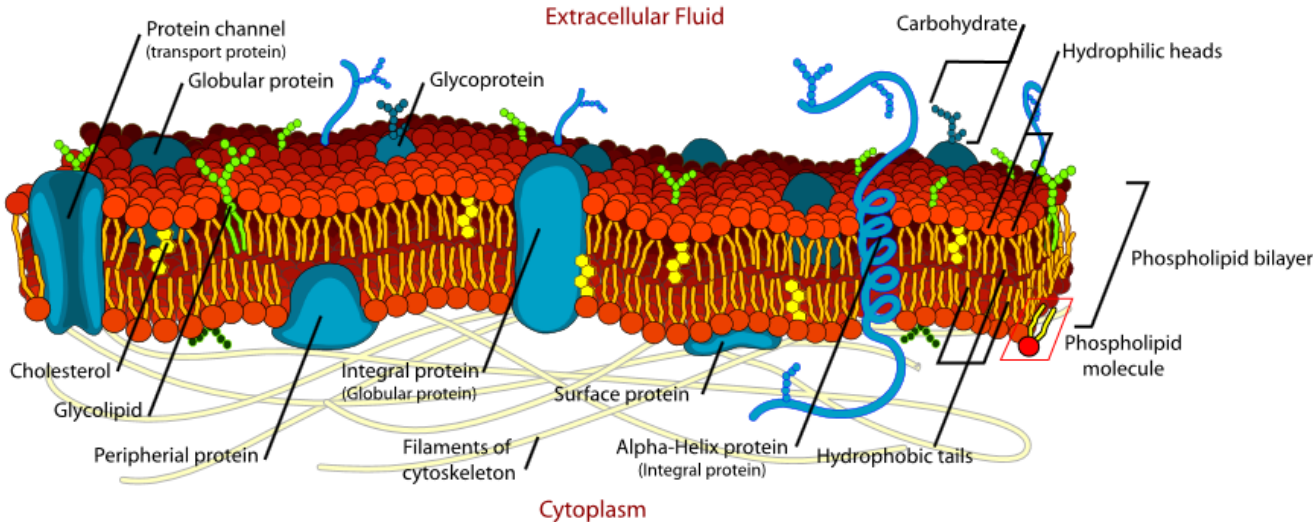
Cell recognition

Intracellular communication

Enzyme activity

Diffusion and Osmosis - explanations and scenarios





Membrane form and function

Passive transport

Osmosis

Diffusion

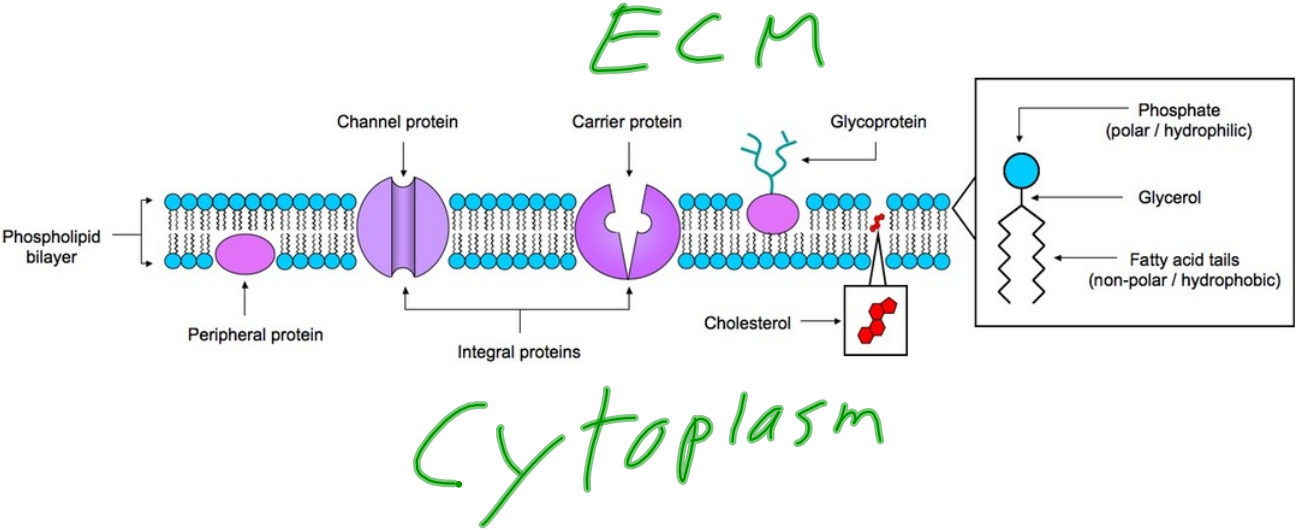
Facilitated
diffusion

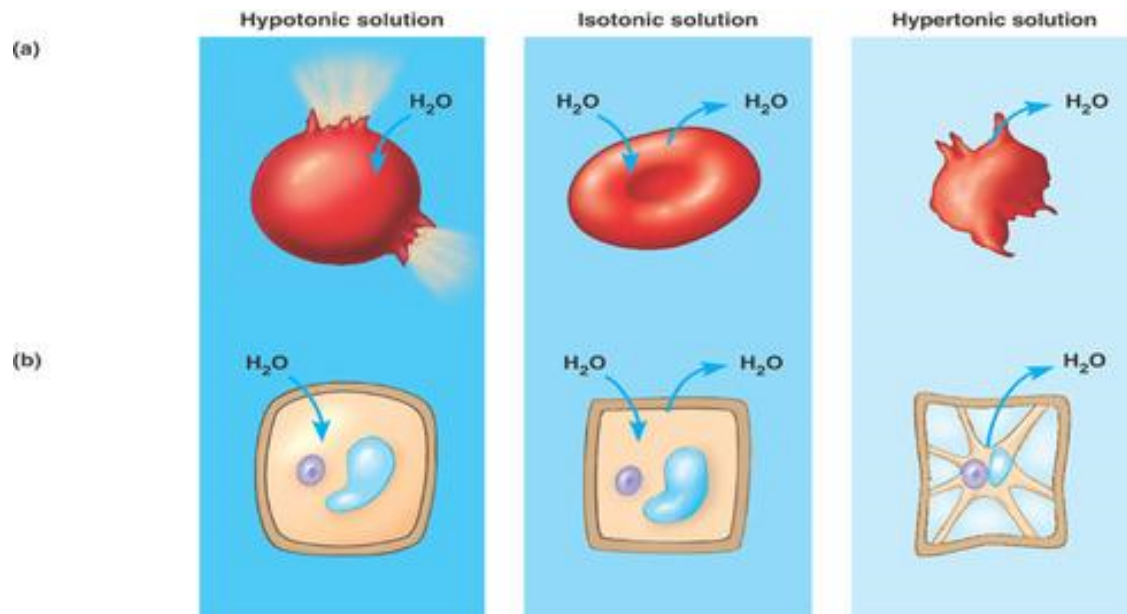
Active Transport

Exocytosis

Endocytosis

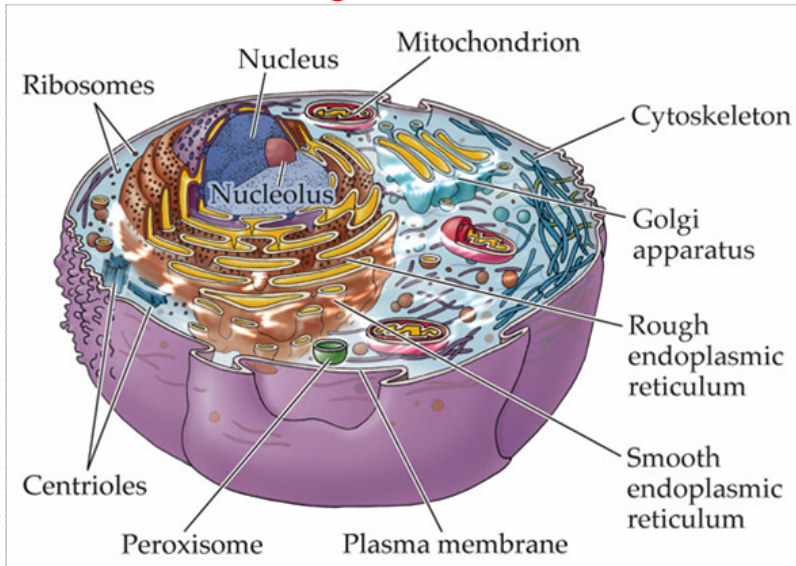
Protein Pumps



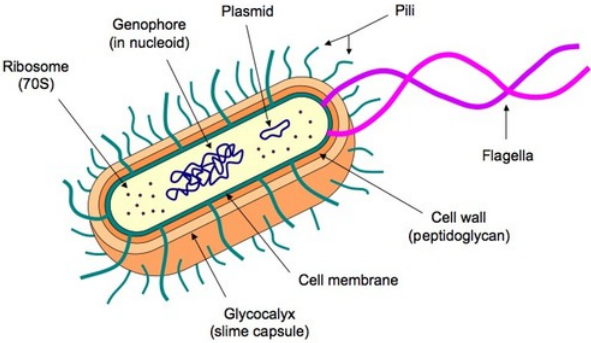
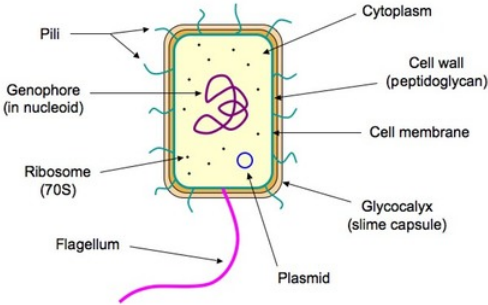


Surface area to volume
calculate ratio
Explain importance

Cell organelles annotate a cell



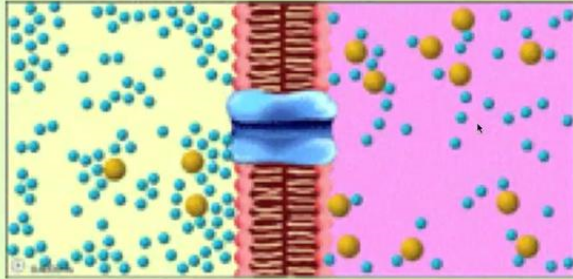
E coli



2.4.4

Osmosis - Diffusion of water across a semi-permeable membrane

Take A Look: Osmosis



1.6.U6 Mutagens, oncogenes and metastasis are involved in the development of primary and secondary tumors.

If a mutation occurs in an **oncogenes** it can become cancerous. In normal cells oncogenes control of the cell cycle and cell division.

