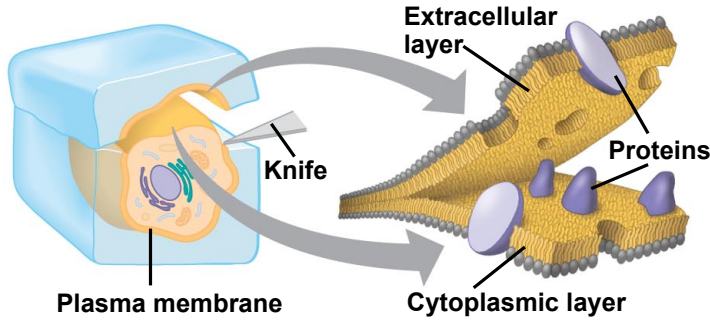


TECHNIQUE



Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.

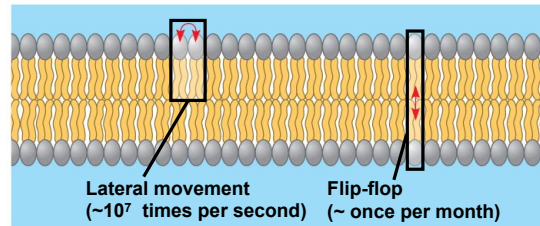
RESULTS



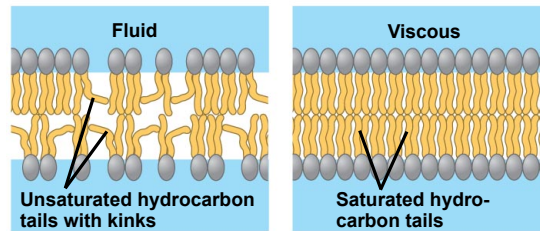
Inside of extracellular layer



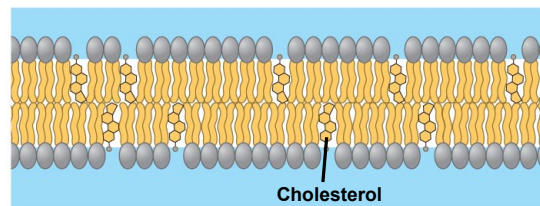
Inside of cytoplasmic layer



(a) Movement of phospholipids

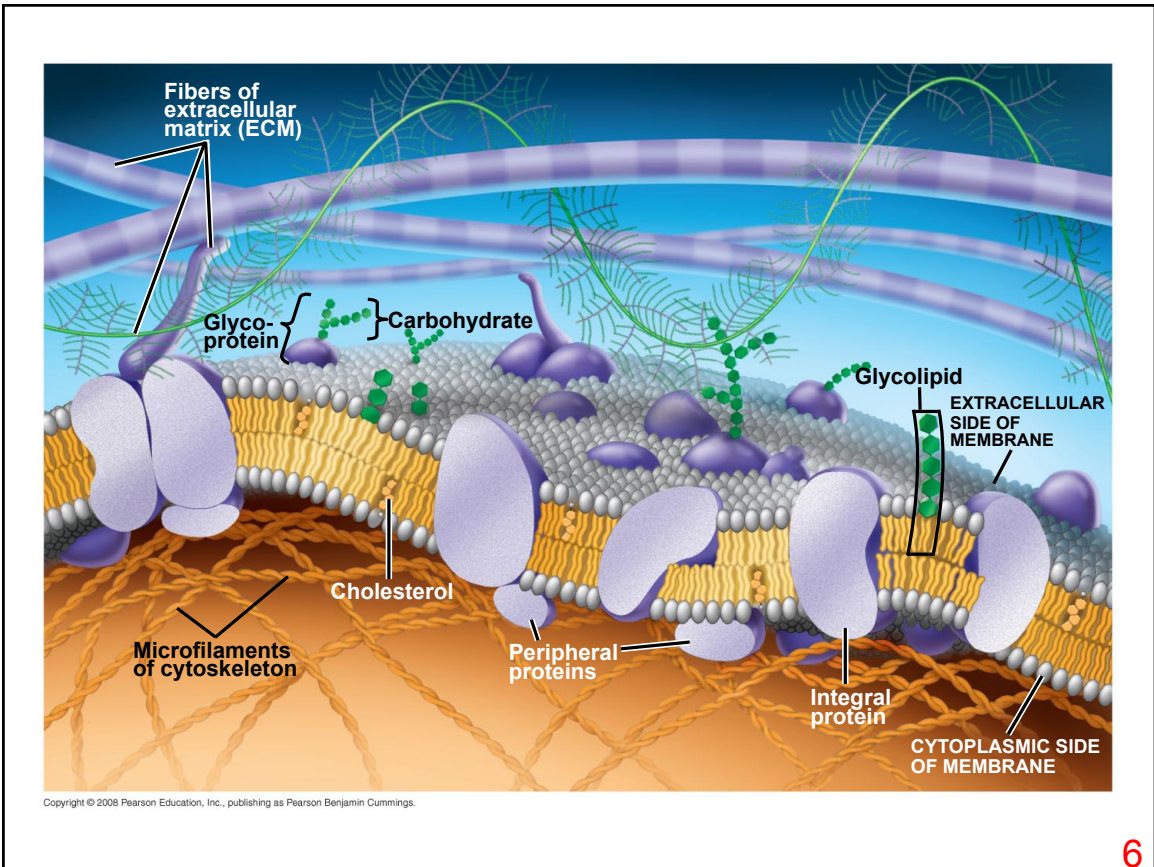
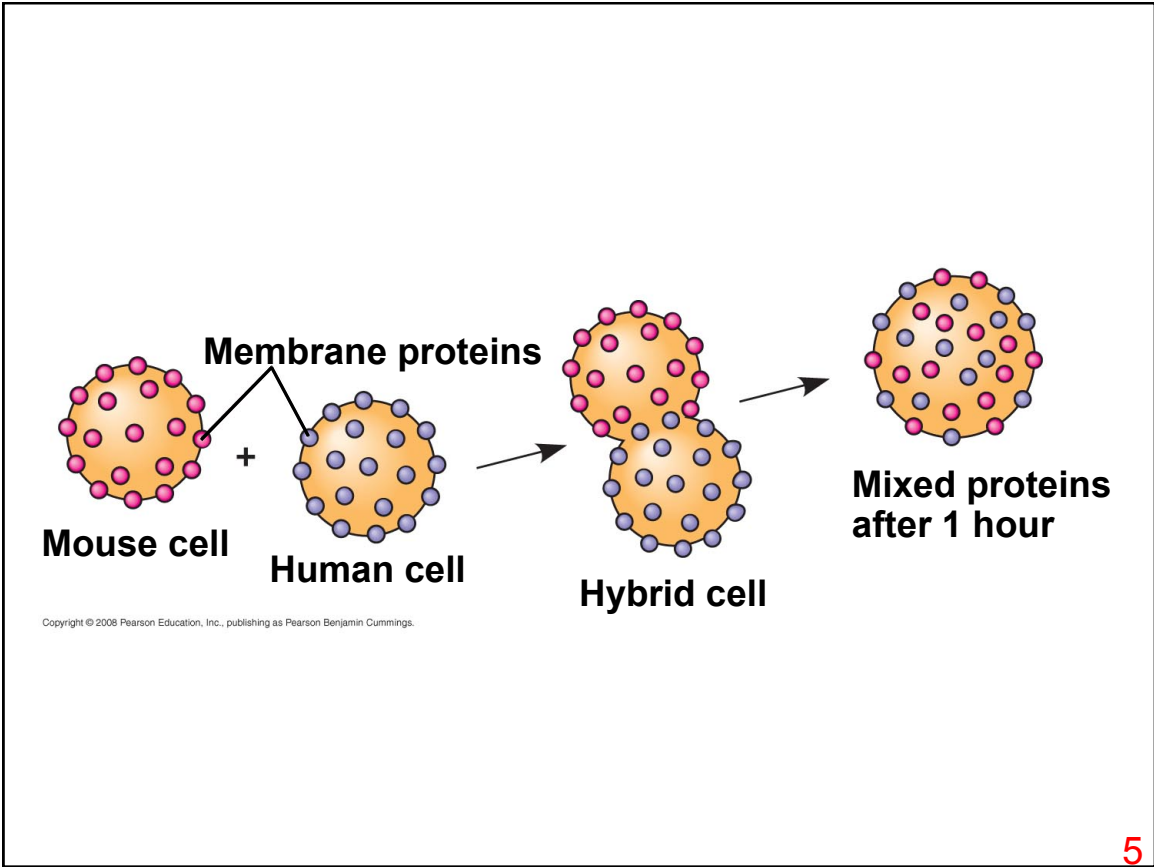


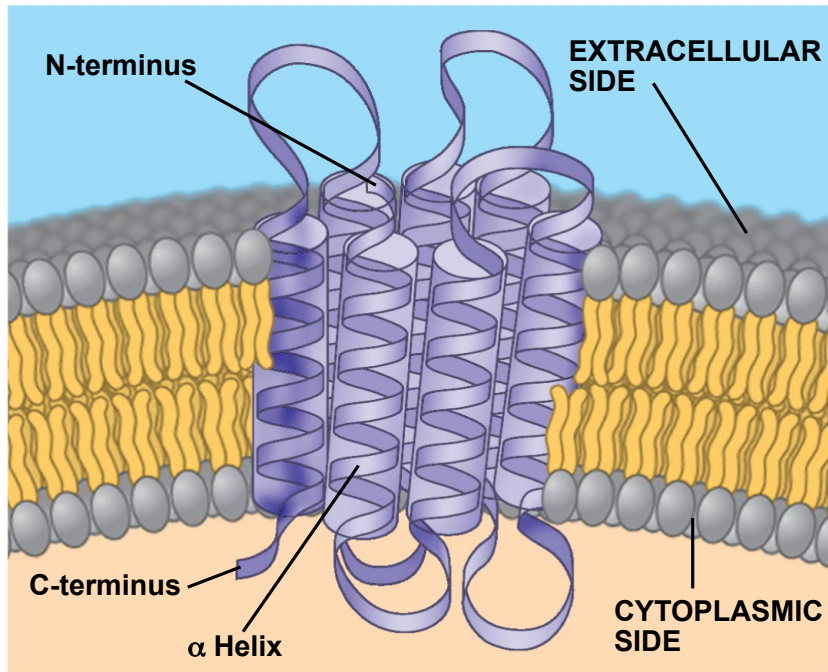
(b) Membrane fluidity



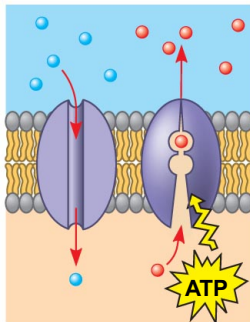
(c) Cholesterol within the animal cell membrane

Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.

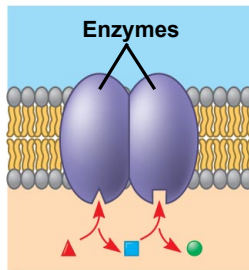




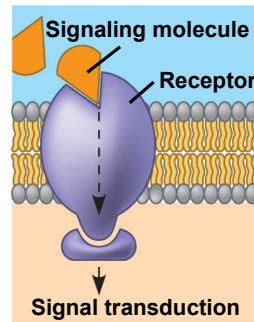
Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.



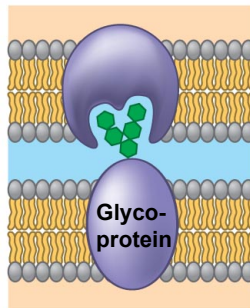
(a) Transport



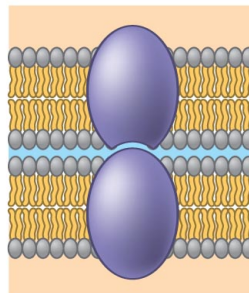
(b) Enzymatic activity



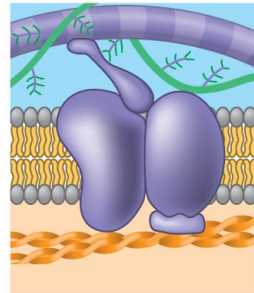
(c) Signal transduction



(d) Cell-cell recognition

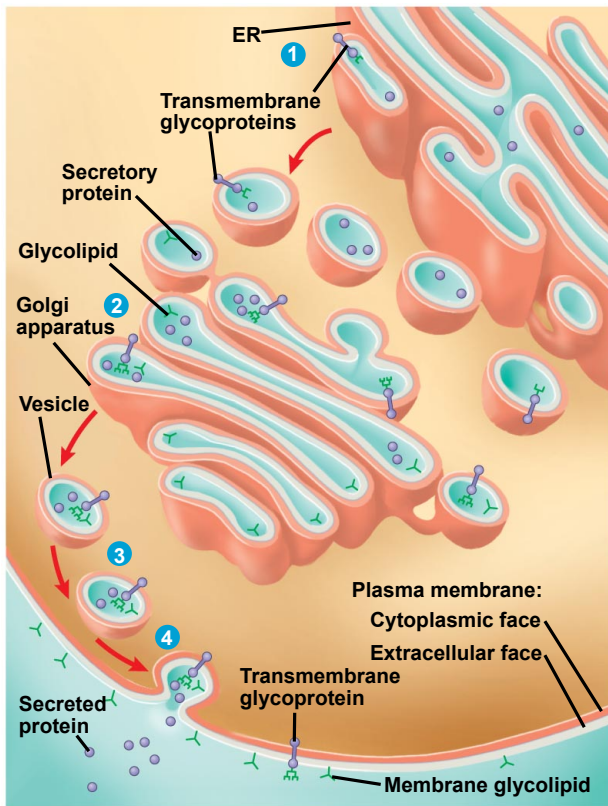


(e) Intercellular joining

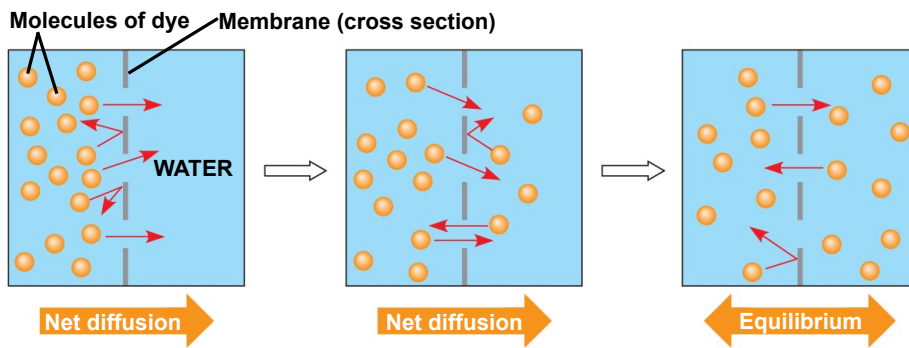


(f) Attachment to the cytoskeleton and extracellular matrix (ECM)

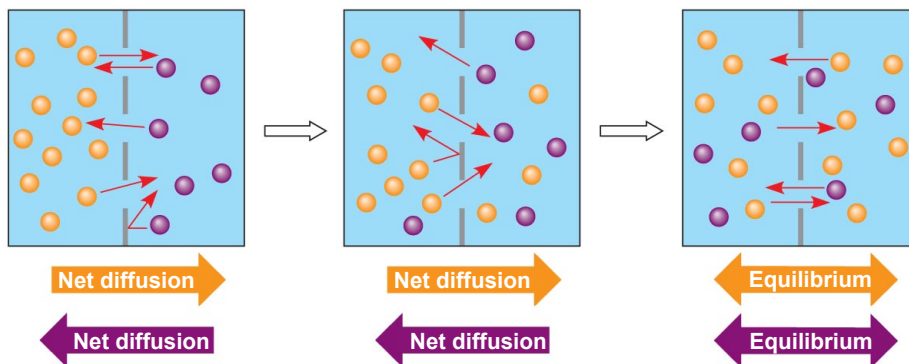
Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.



Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.

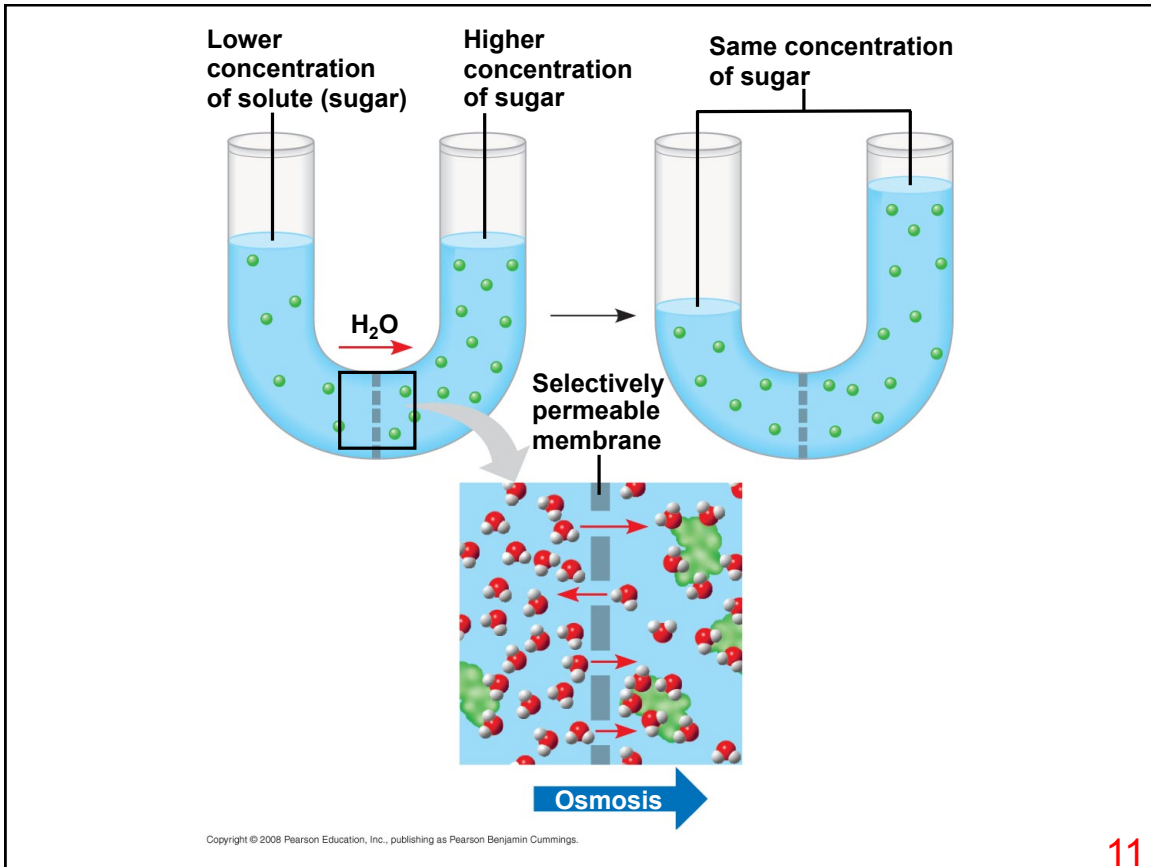


(a) Diffusion of one solute

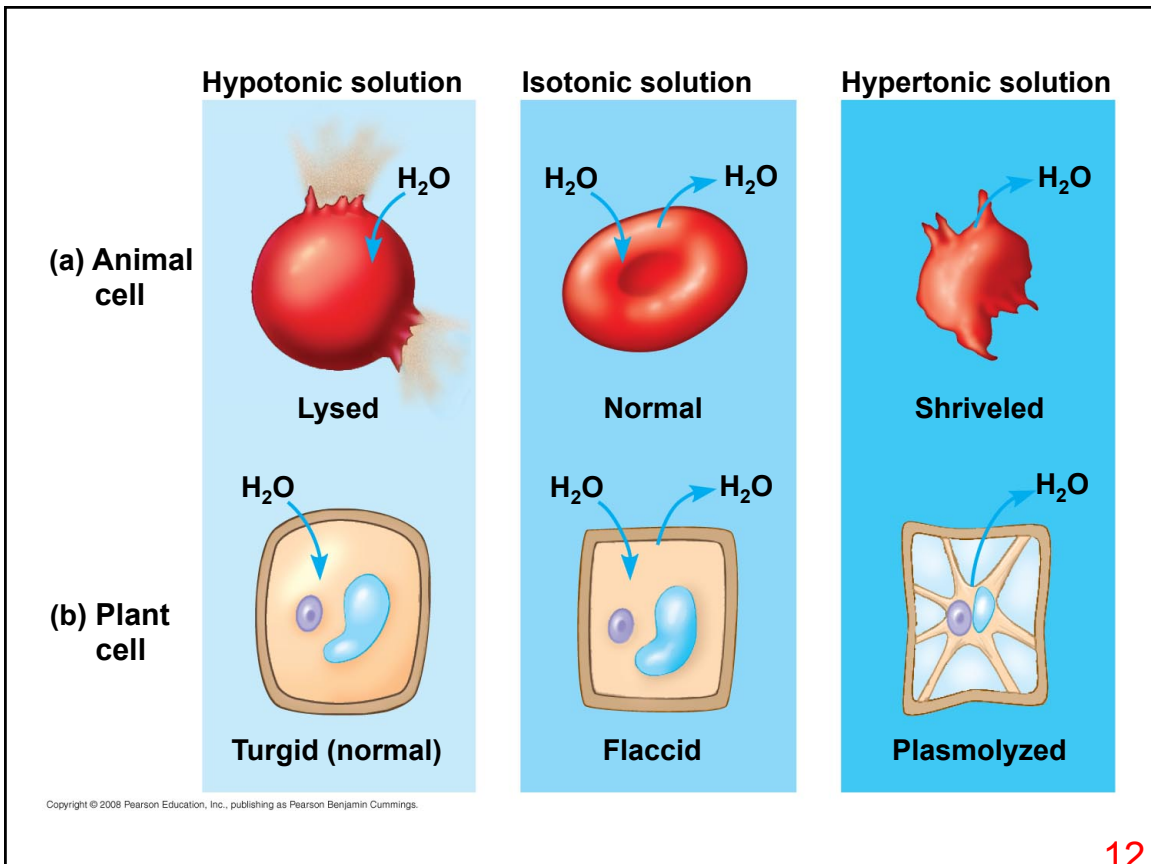


(b) Diffusion of two solutes

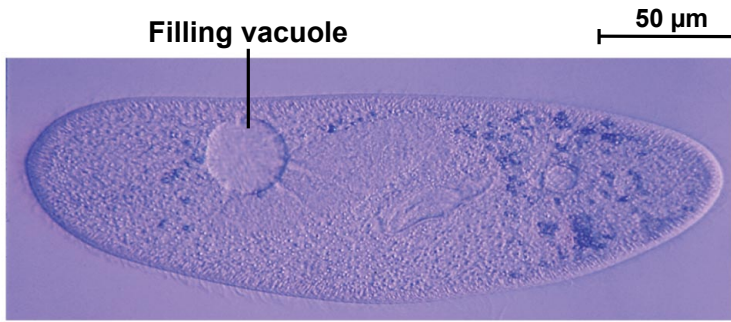
Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.



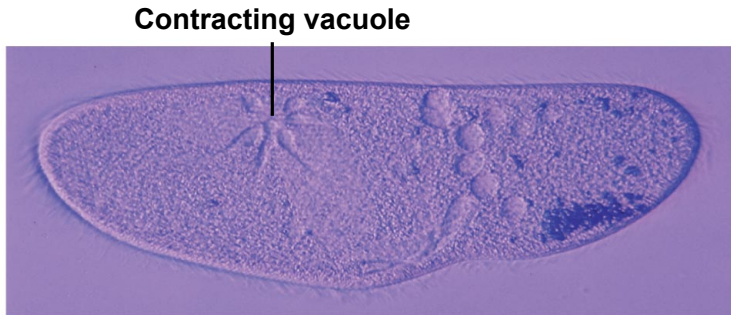
11



12

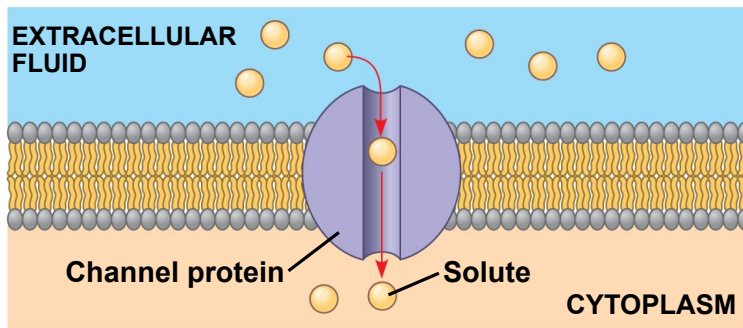


(a) A contractile vacuole fills with fluid that enters from a system of canals radiating throughout the cytoplasm.

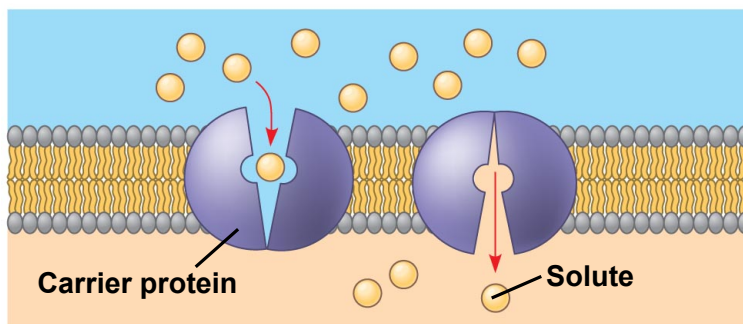


(b) When full, the vacuole and canals contract, expelling fluid from the cell.

Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.

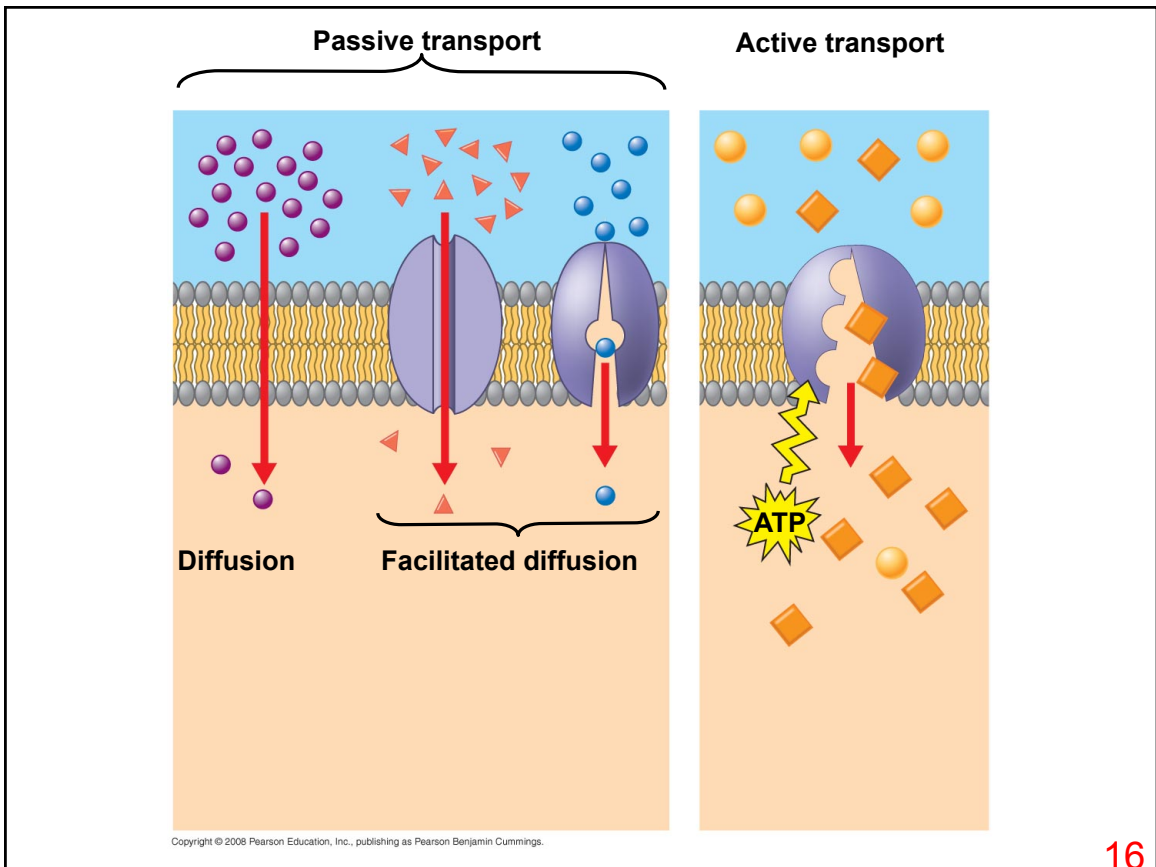
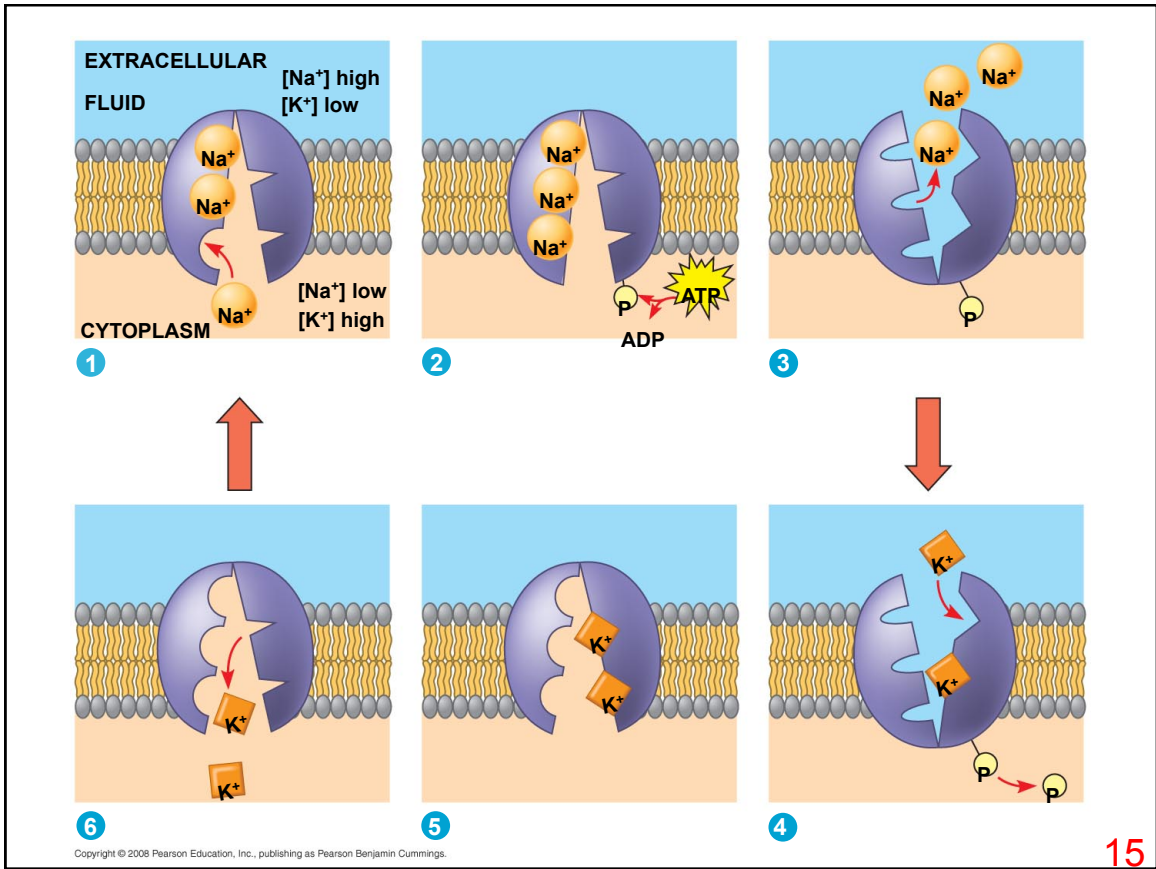


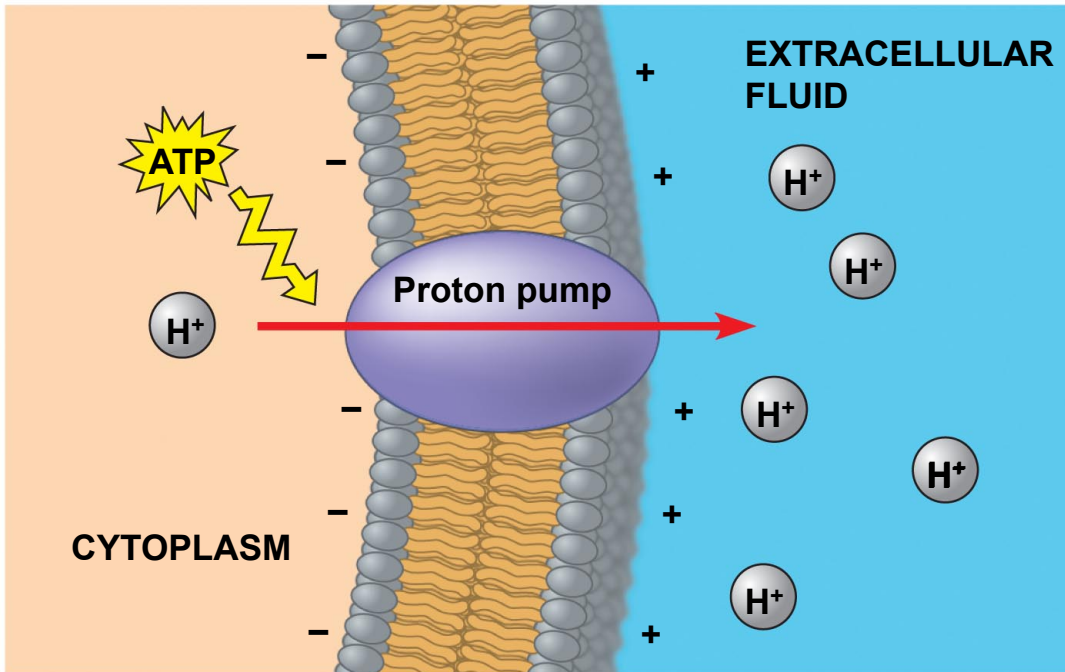
(a) A channel protein



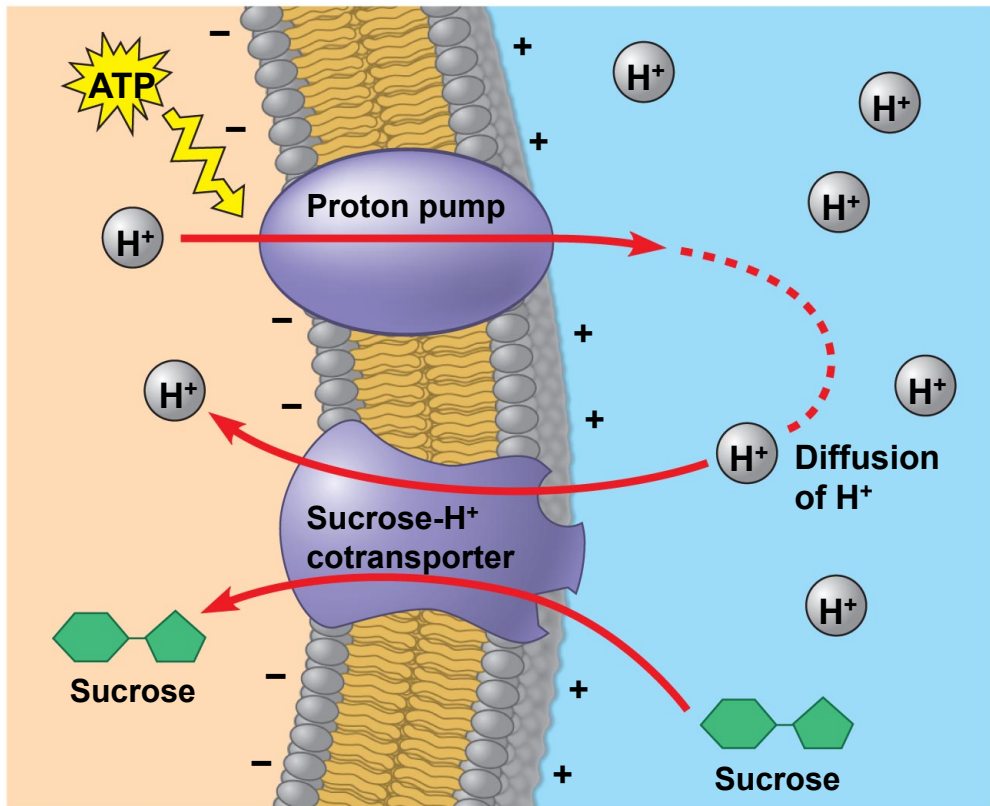
(b) A carrier protein

Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.

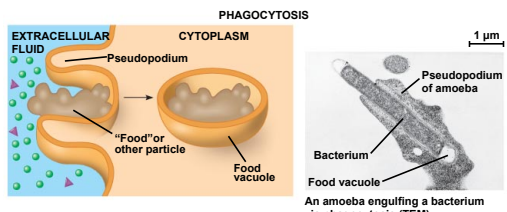




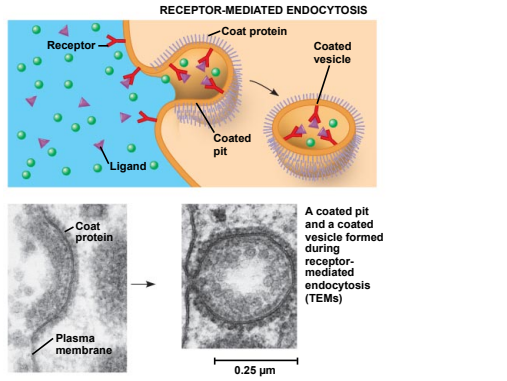
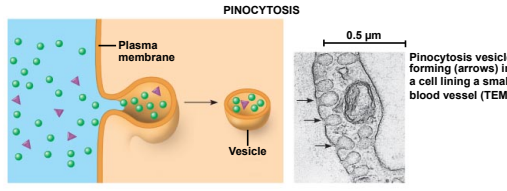
Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.



Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.



An amoeba engulfing a bacterium via phagocytosis (TEM)



Copyright © 2008 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.