

Chapter 4-1

You should be able to answer these questions.

Distinguish between polar and non-polar molecules.

Identify different kinds of cell-membrane proteins.

Summarize the function of the Golgi.

ATP- main energy current
of cells

When carbs and fats are
broken down they are stored
temporarily as ATP. Car: gas
Flashlight:
batteries
cell: ATP

Homeostasis-

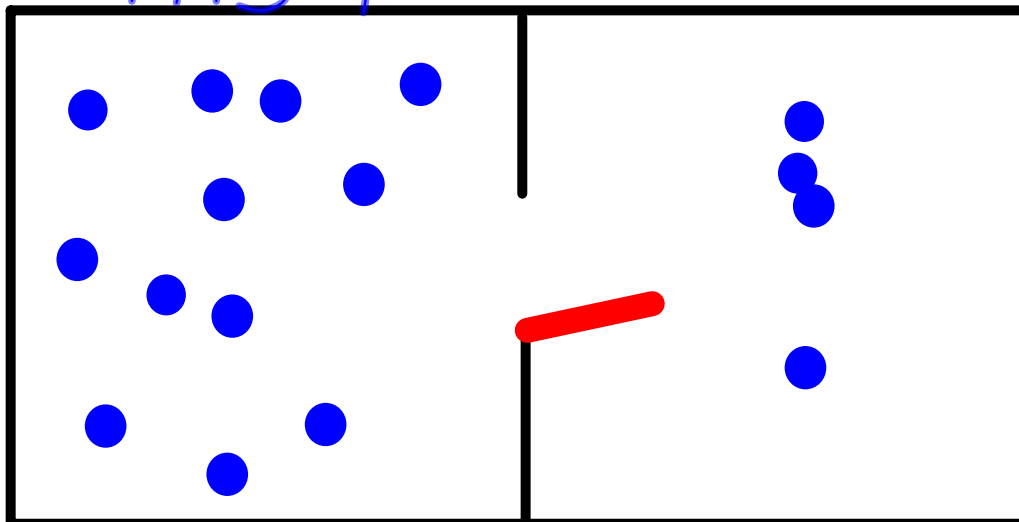
state of
being content

Cell must use energy to move some things across the cell membrane and other times no energy is required.

passive ← Send e-mail

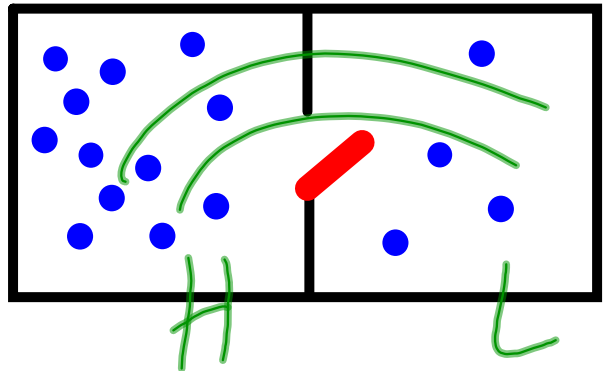
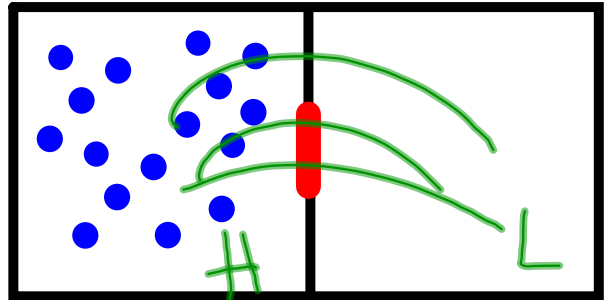
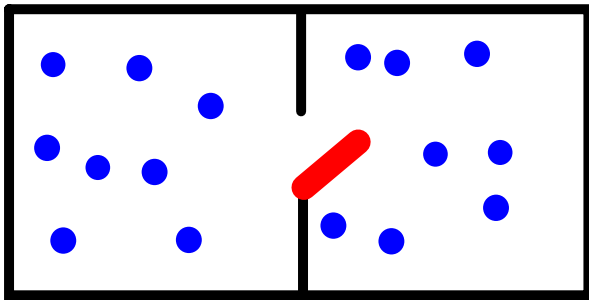
active ← Send a letter

Passive Transport no energy
High Low



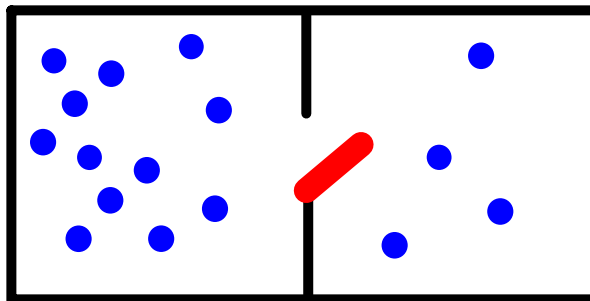
Video

Concentration
gradient- a
difference in the
concentration of a
Substance

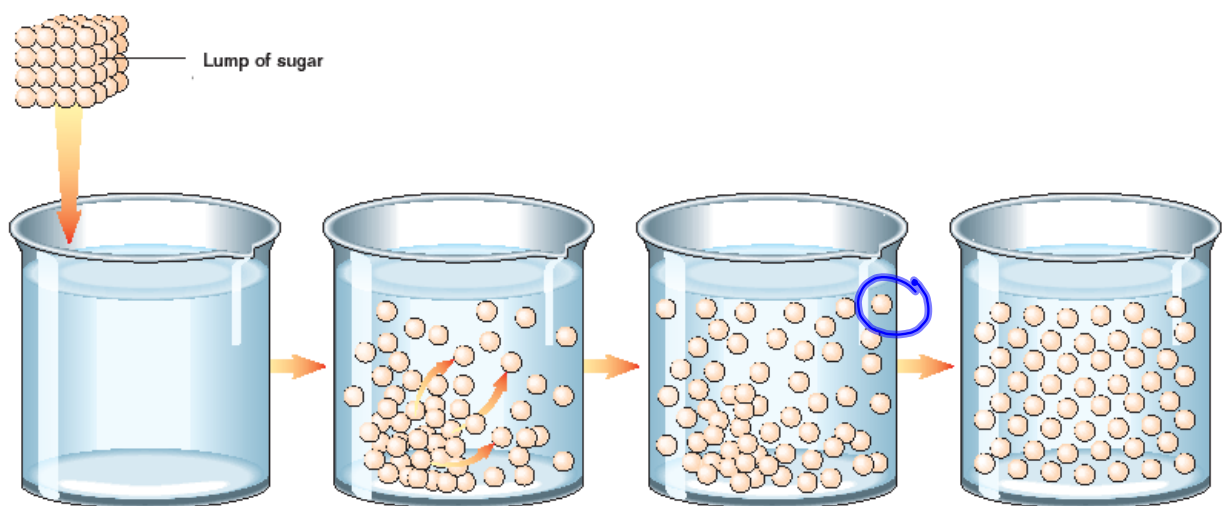


Equilibrium- when the
concentration of a
substance is
equal throughout a
space

Diffusion- the movement of a substance from an area of higher concentration to an area of lower concentration caused by the random movement of particles



Beaker with water



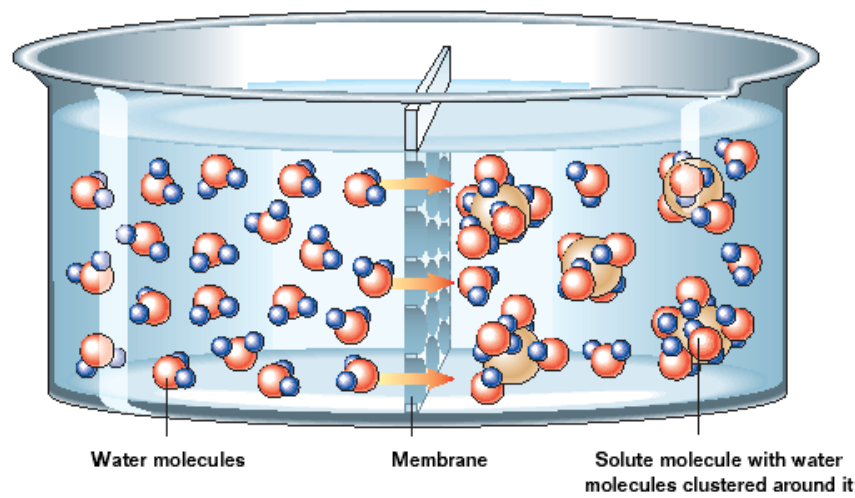
BIOSOURCES
TEACHING TRANSPARENCIES

Osmosis-
diffusion of
Water
molecules

Why do you
gargle with salt
water for a sore
throat?

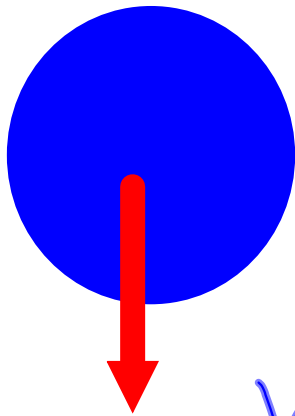


Video



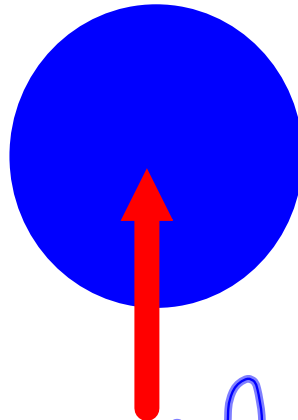
BIOSOURCES
TEACHING TRANSPARENCIES

Hypertonic



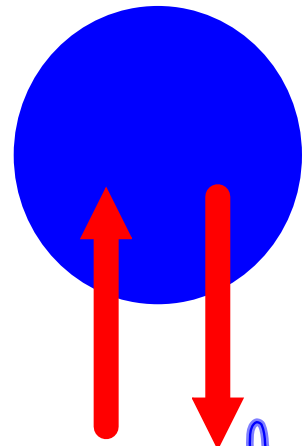
shrink

Hypotonic



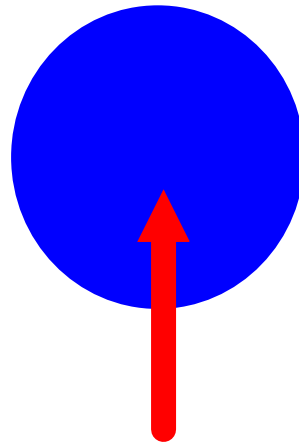
swell

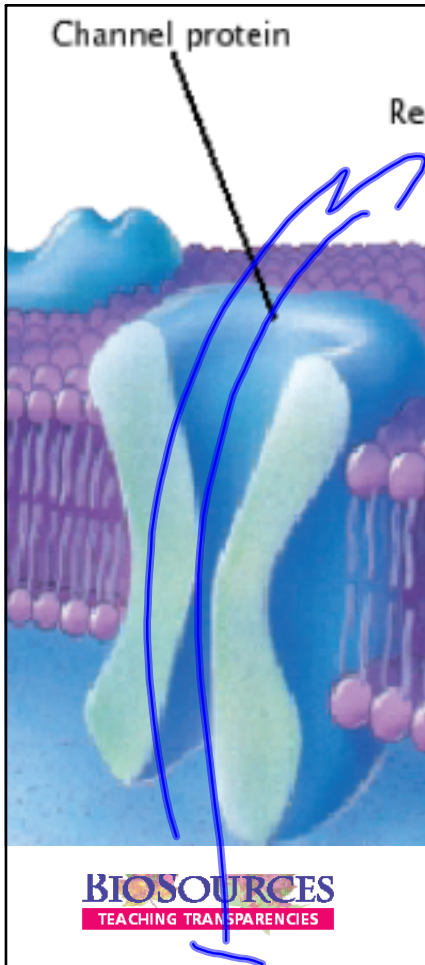
Isonic



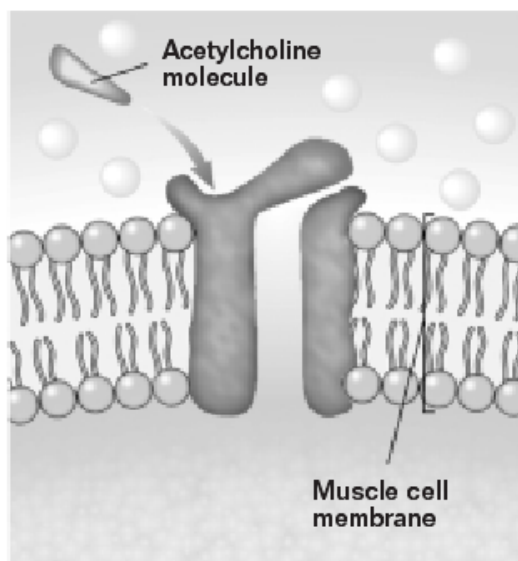
equal

If left unchecked,
this could cause a
cell to burst.

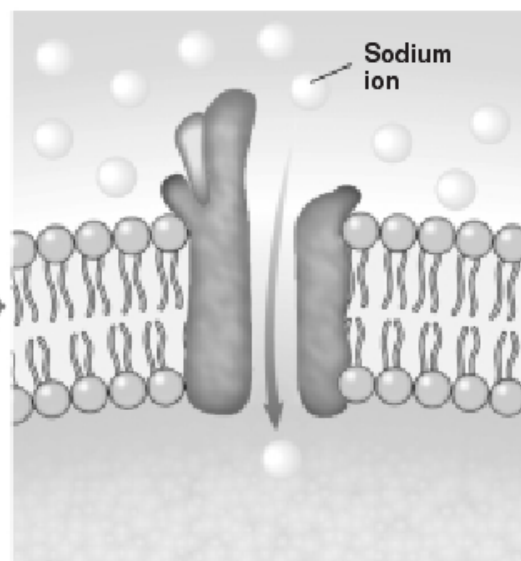




Other wise
known as a
transport
Protein helps the
movement of
substances into
and out of
the cell.



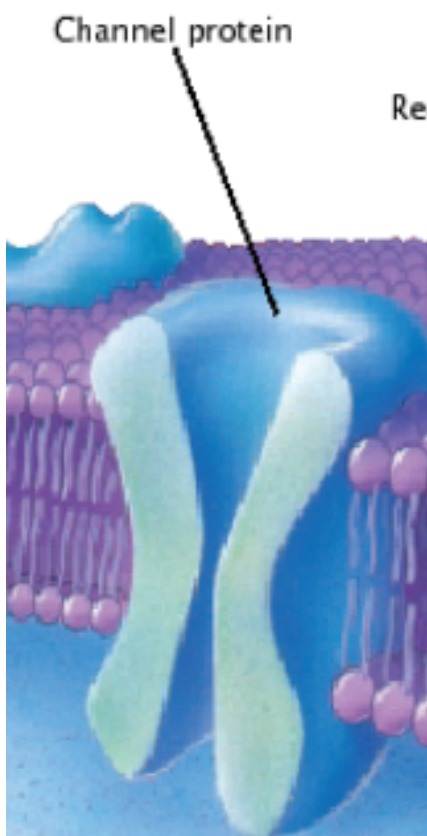
Closed channel



Open channel

Ion Chanel

BIO SOURCES
TRANSPARENCY MASTER



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Facilitated Diffusion - a type of passive transport because it moves substances down their concentration gradient without using the cell's energy