

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-

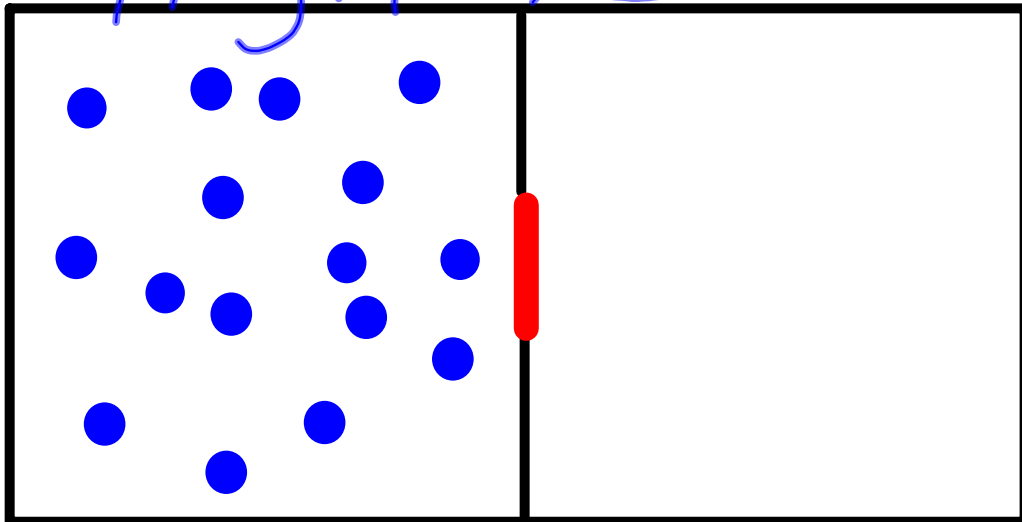
State of
being content

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

Passive transport - Sending e-mail
Active transport - Sending letter

Passive Transport

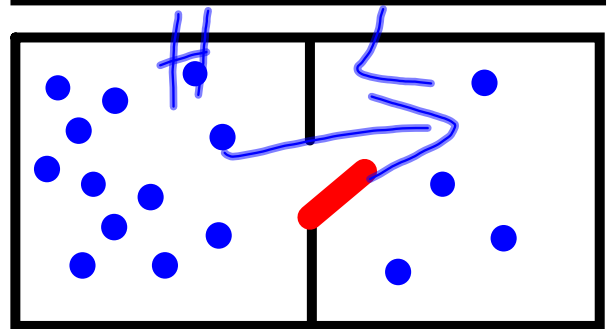
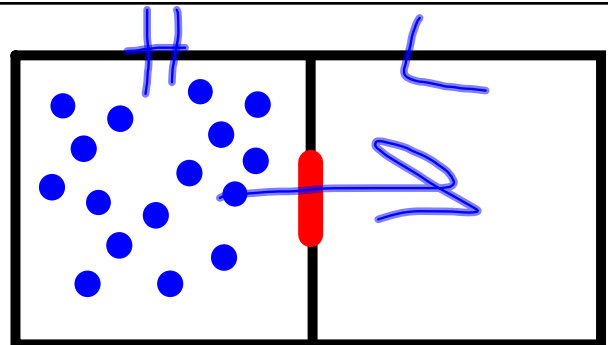
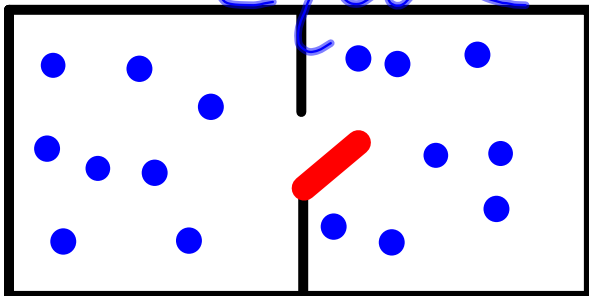
High \rightarrow Low



Video

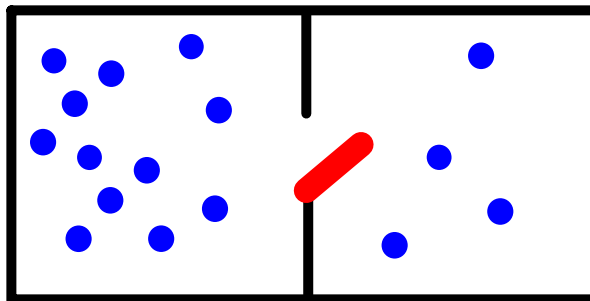
Concentration
gradient- a
difference in the
concentration of a

Substance
equal

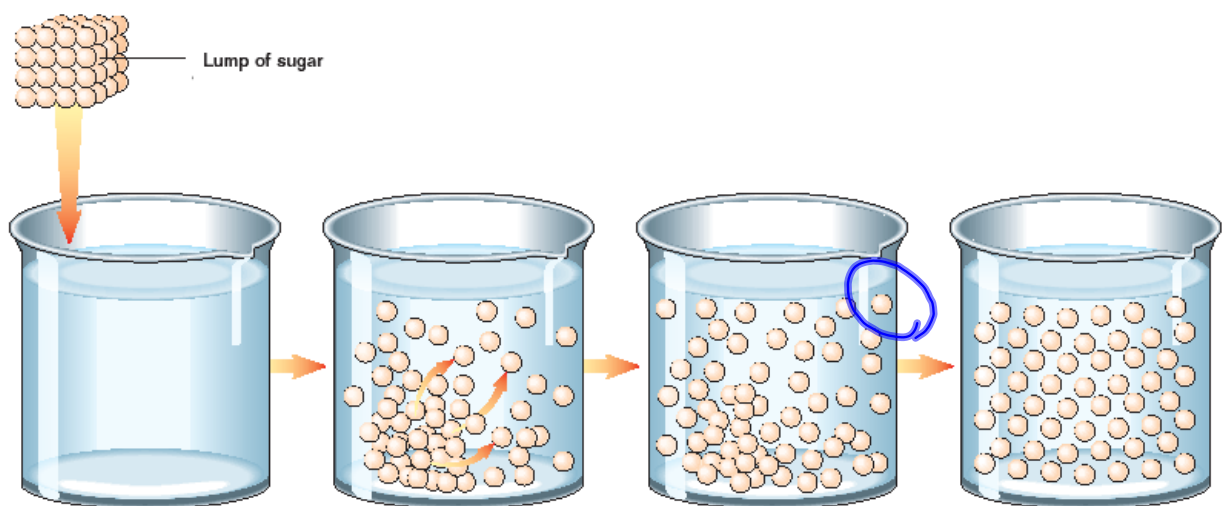


Equilibrium- when the
Concentration of a
substance is
equal throughout a
space

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



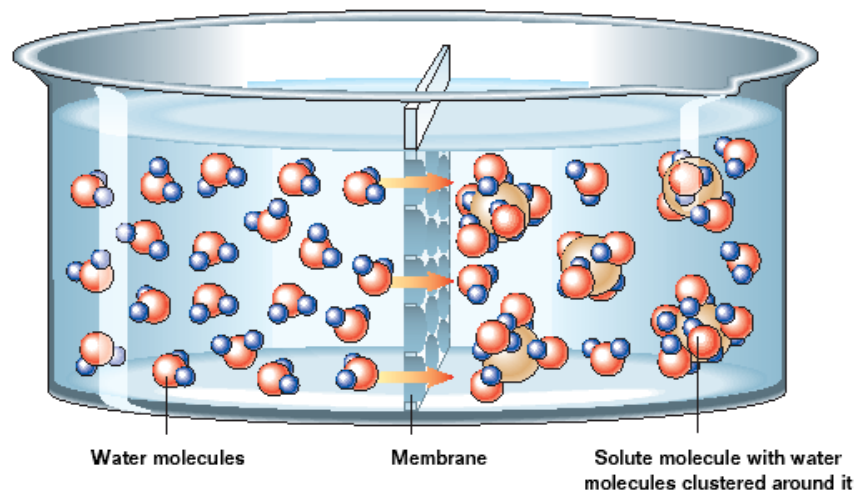
BIOSOURCES
TEACHING TRANSPARENCIES

Osmosis-
diffusion of
Water
molecules

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

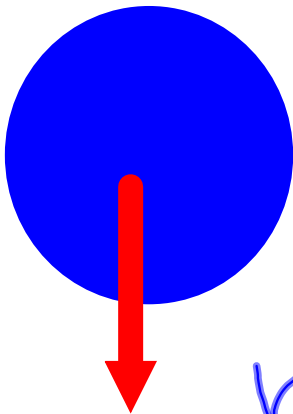


Video



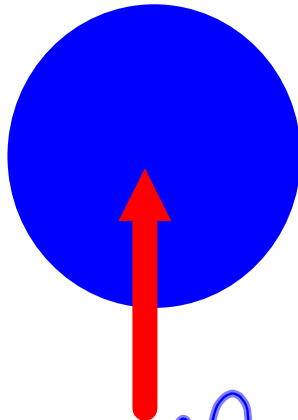
BIOSOURCES
TEACHING TRANSPARENCIES

Hypertonic



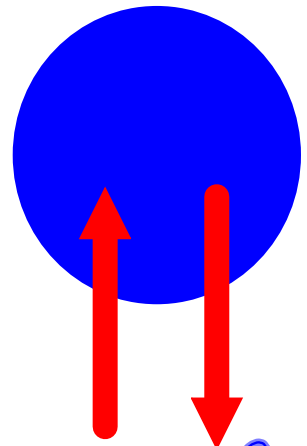
Shrink

Hypotonic



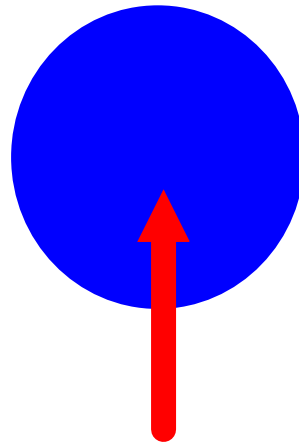
swell

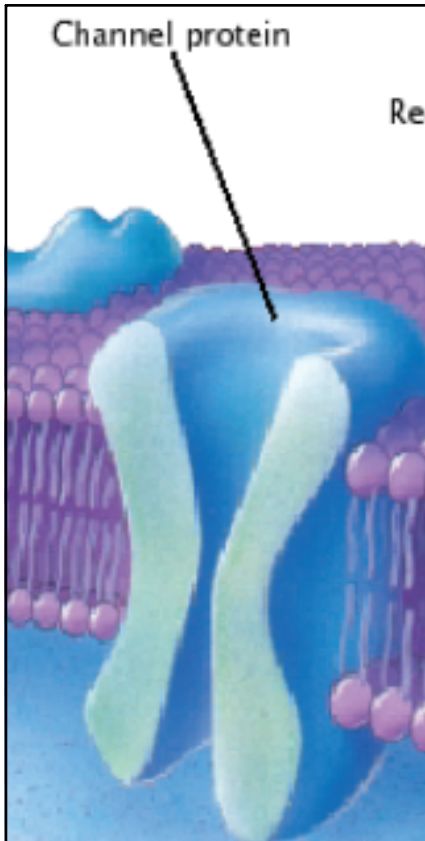
isotonic



equal

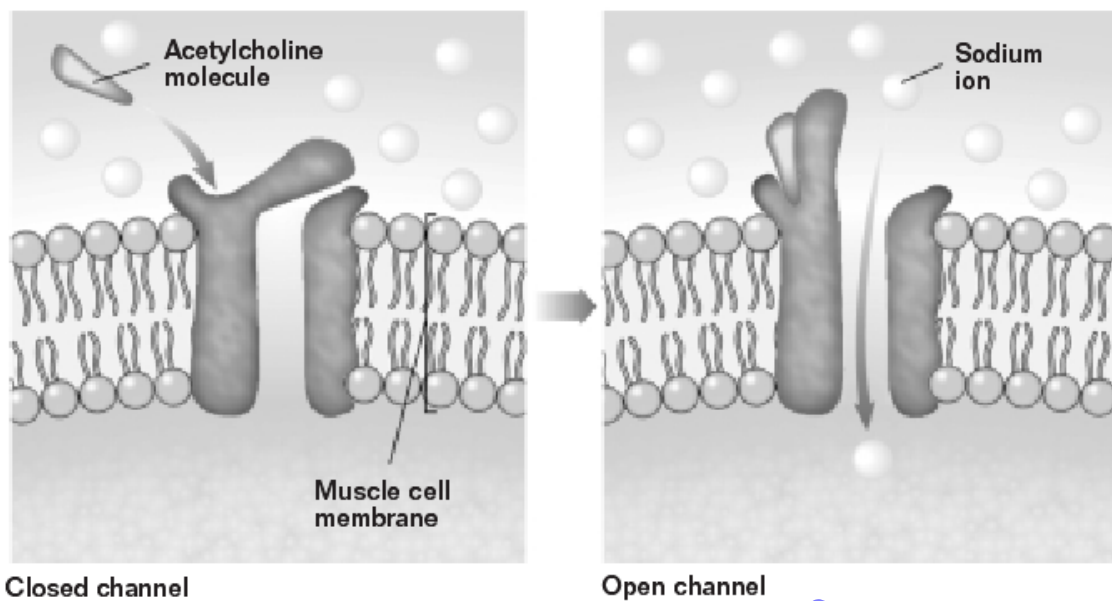
If left unchecked,
this could cause a
cell to burst.





BIO SOURCES
TEACHING TRANSPARENCIES

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

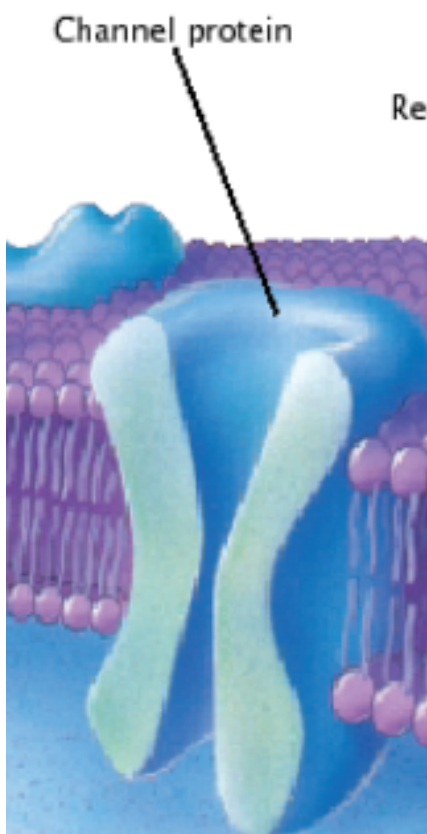


Closed channel

Open channel

Ion Channel

BIO SOURCES
TRANSPARENCY MASTER



BIOSOURCES
TEACHING TRANSPARENCIES

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