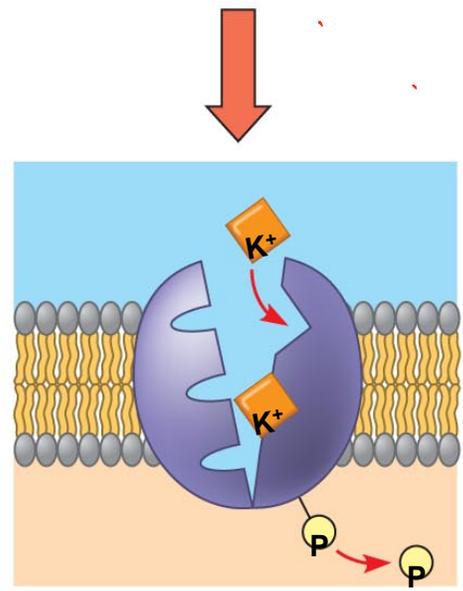
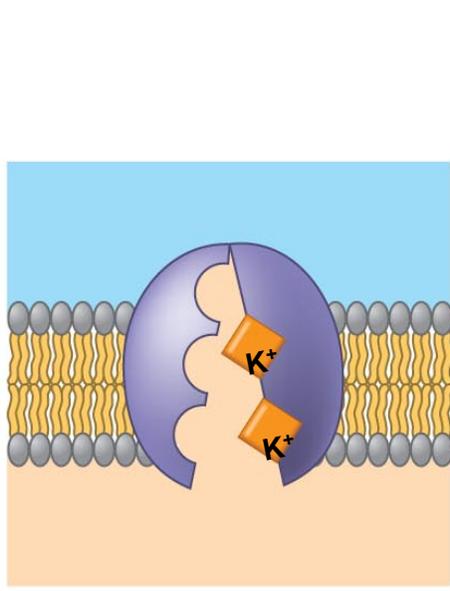
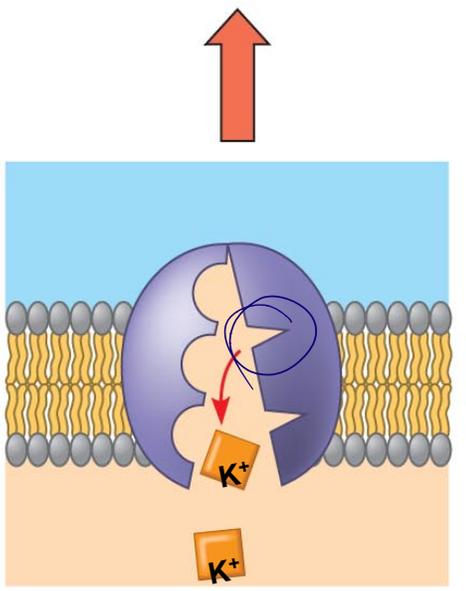
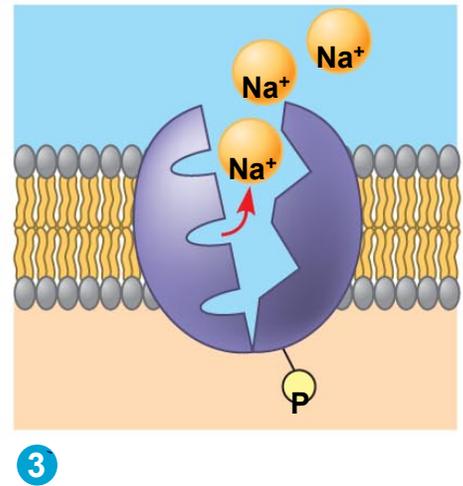
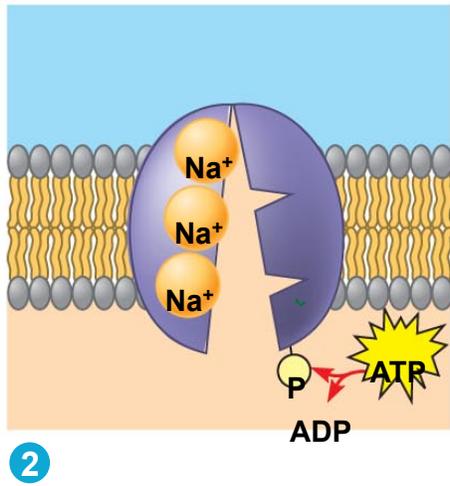
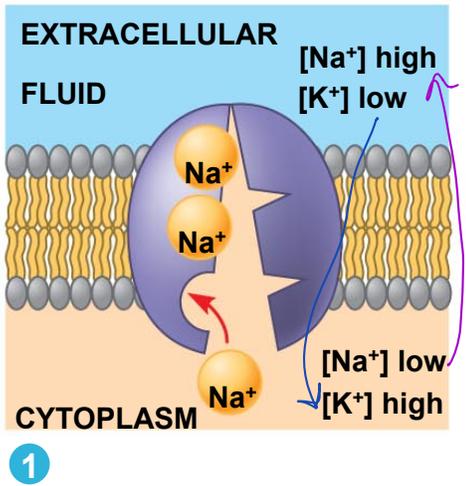


Fig. 7-16-7

Sodium Potassium pump



Same

diffusion?

brings "stuff" in
low concentration
proteins open to let
"stuff" in

stuff transported does
not change during transport

homeostasis

Specific for 1 substance
transport (carrier) can
change shape

- all have phospholipid membrane
- they move particles
- use proteins
- equilibrium is the point
- only allow certain particles
in + out (specific)

Same

- outside cell to inside cell
- particles can move either way
- both travel thro (carrier)
protein

Different

Active goes AGAINST (up)
concentration gradient
Designated place in protein for
each substance

Every substance transported has
its own protein channel
or protein pump.

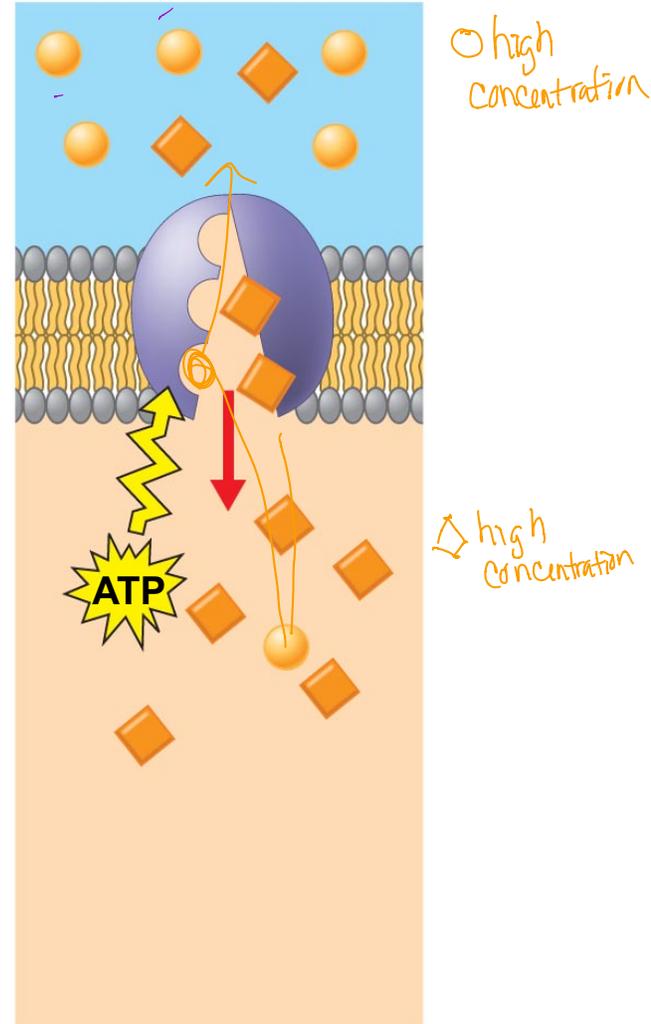
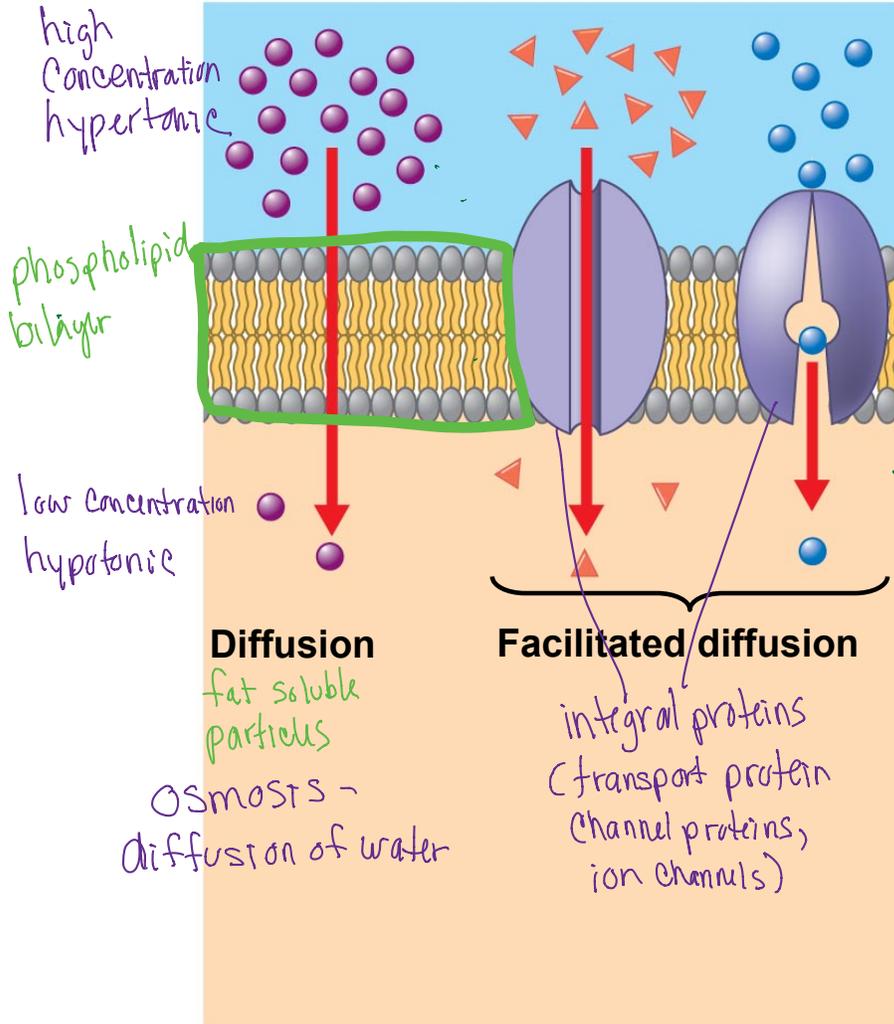
- active transport requires
energy from cell
- active transport goes
against concentration
gradient
- passive does not always
need proteins

Different

- active requires energy
(ATP)
- passive has
3 different types
- ion channels are carrier proteins

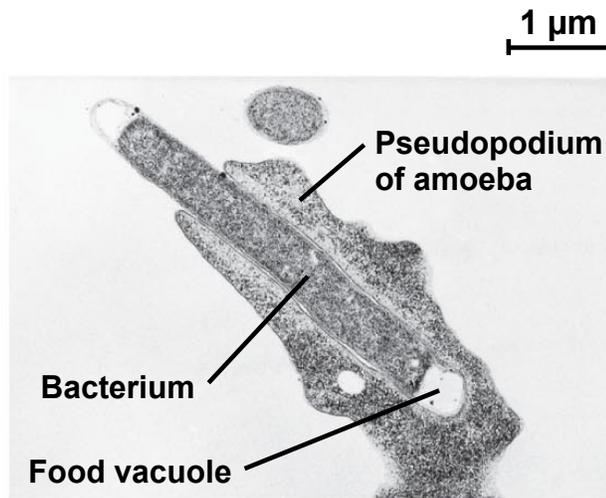
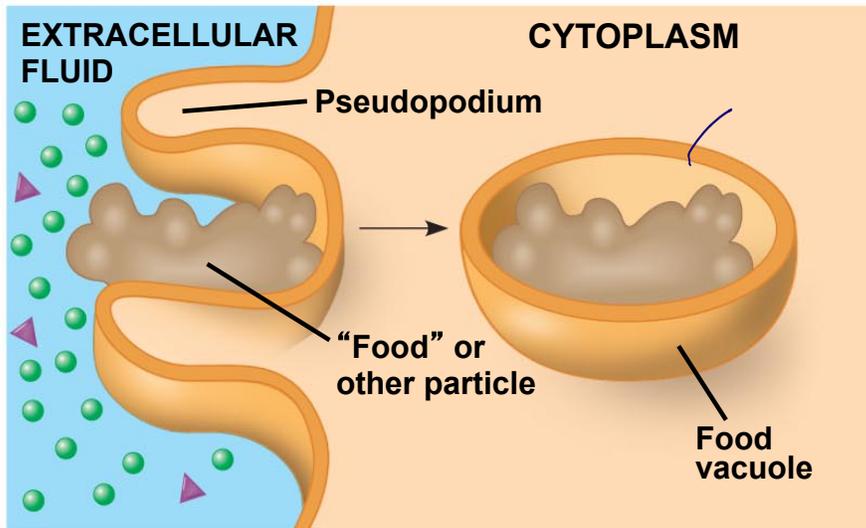
Passive transport - no energy from cell

Active transport uses energy from cell



ACTIVE TRANSPORT - requires energy

PHAGOCYTOSIS - taking in = endocytosis



An amoeba engulfing a bacterium via phagocytosis (TEM)

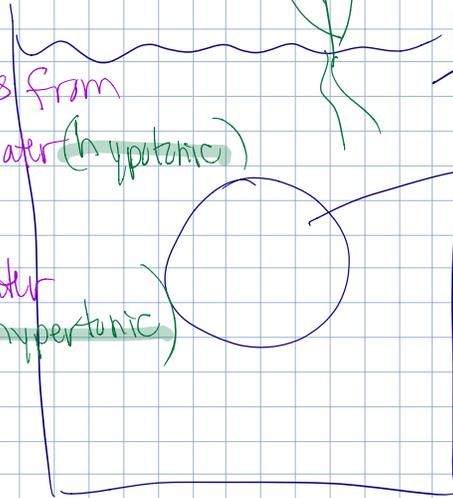
in reverse -

exocytosis: cells can release materials (product or waste) in vesicle from Golgi

Osmosis

Water moves from
high conc water (hypotonic)
to

low conc water (hypertonic)



distilled water
hypotonic

high
conc
water

RBC

hypertonic

low conc water

wilted plant has
low turgor
pressure