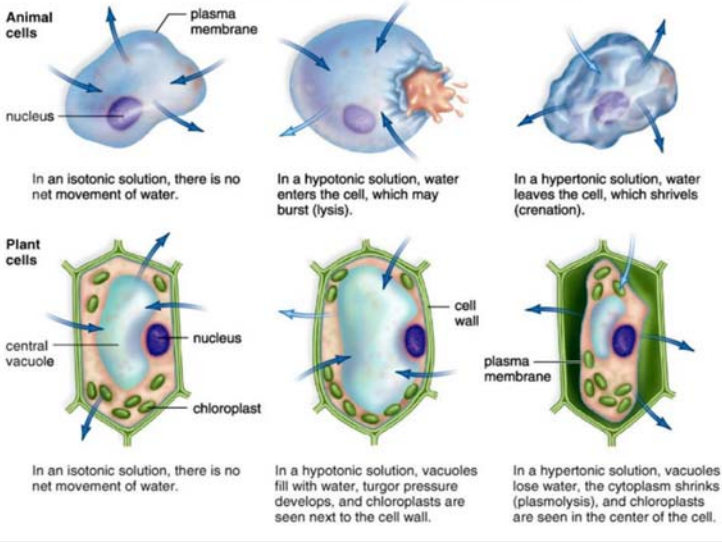


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### How Cells Maintain Homeostasis:

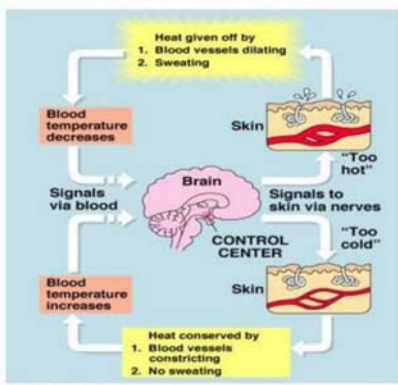
Balance/Regulate what goes in & out of cells through plasma membrane

### How Body Systems Maintain Homeostasis:

Send chemical signals to regulate body processes

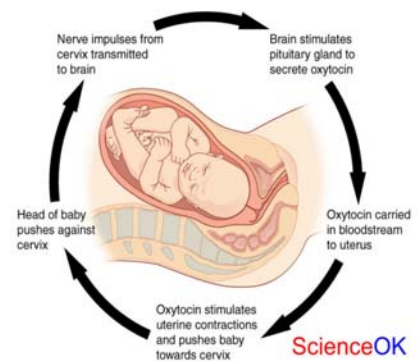
### Negative Feedback:

Regulating an increase or decrease in body function by restoring levels in order to maintain homeostasis



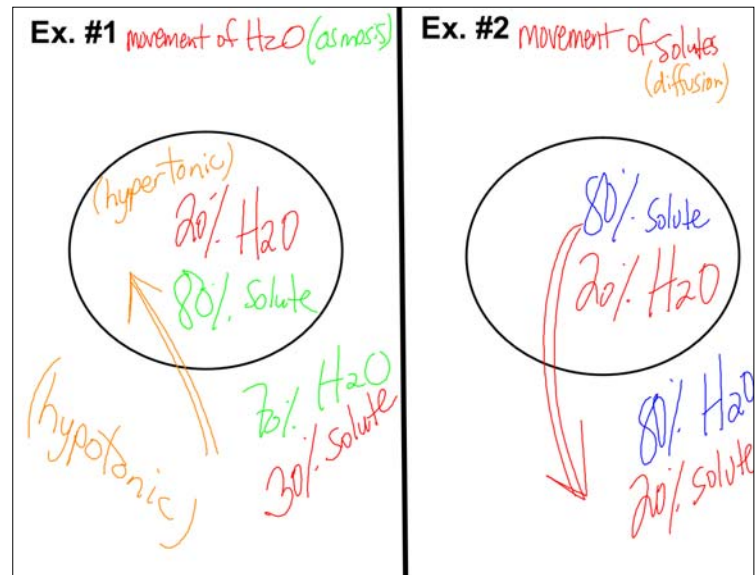
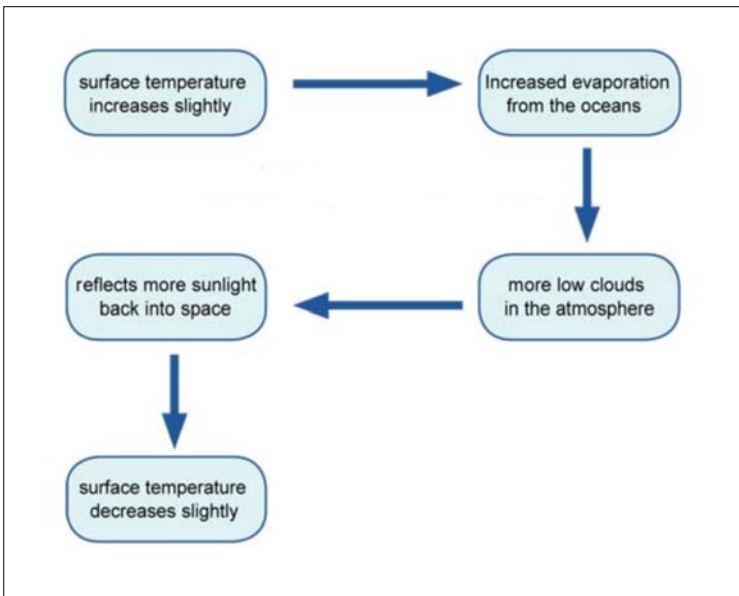
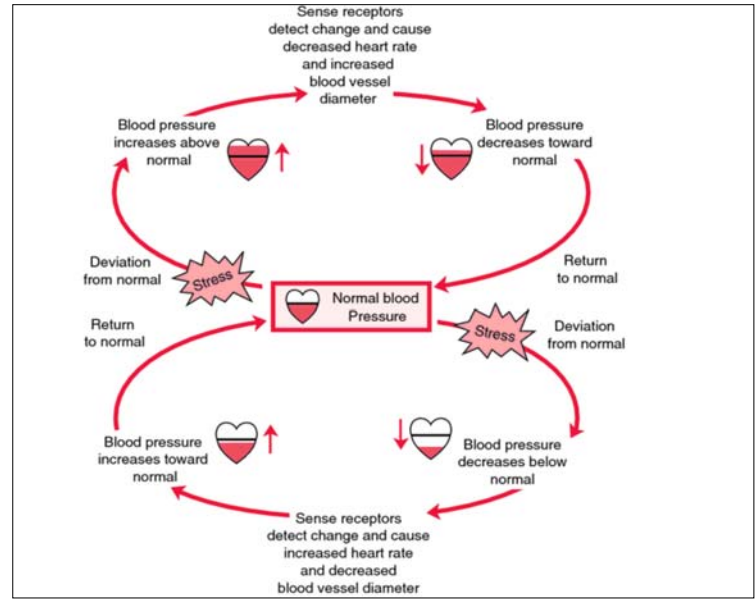
### Positive Feedback:

An enhancement/increase in a process; amplifying an effect

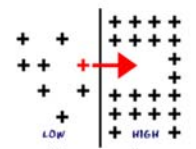


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Label the following Body Systems:



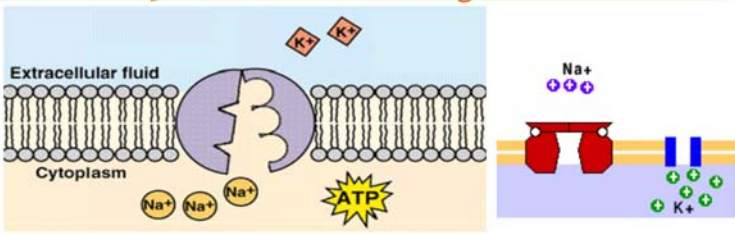
# Active Transport



- Movement of Substances across cell membrane with ENERGY (ATP)
- Types:
  1. Sodium/Potassium Pump (Na+ K+)
  2. Endocytosis
    - a) Pinocytosis
    - b) Phagocytosis
  3. Exocytosis

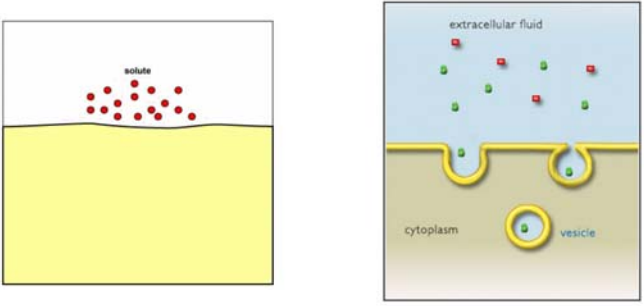
## Na-K Pump

- Protein Channel that pumps 3 Na+ ions OUT of cell & 2 K+ ions INTO cell



## ENDOCYTOSIS

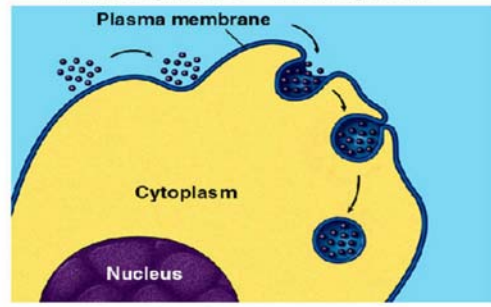
- Cells Engulf substances that are too large to take through membrane IN a vesicle



## PINOCYTOSIS

(solutions)

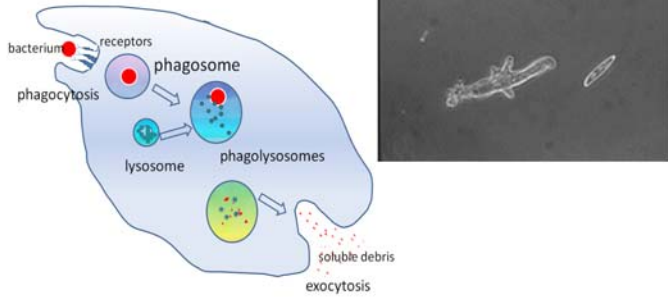
- Movement of solutes & solvents into cell
- “Cell Drinking” Big Gulp



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# PHAGOCYTOSIS

- Movement of large food particles into cell
- “Cell Eating”



# EXOCYTOSIS

- Passage of larger molecules **OUT** of cell
- Proteins leaving cell in secretory vesicle

