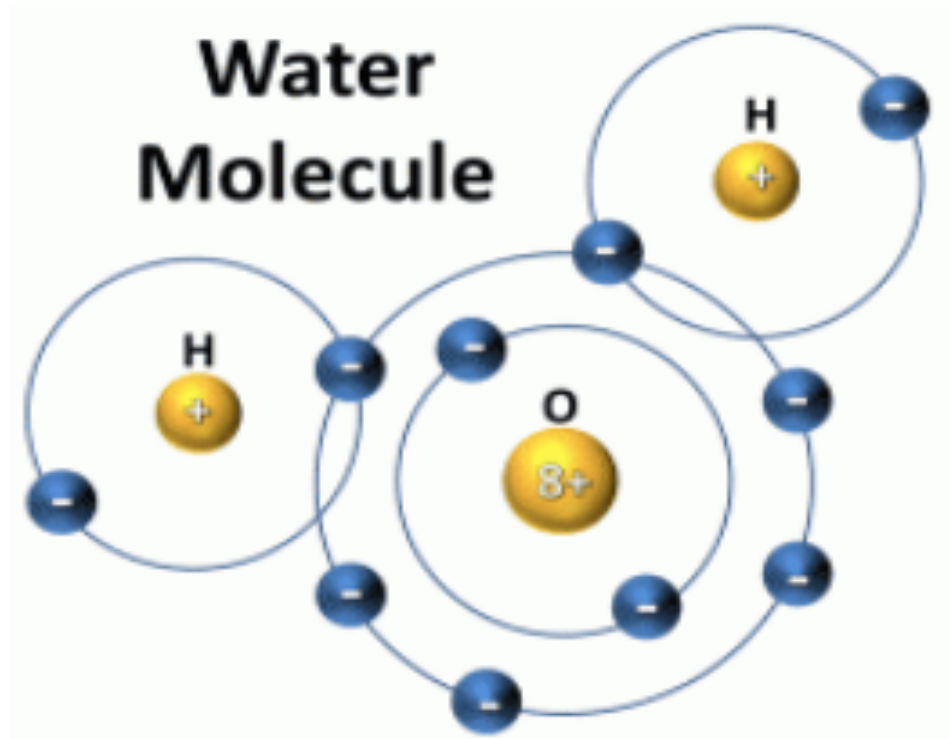


Warm Up 8/28-8/29

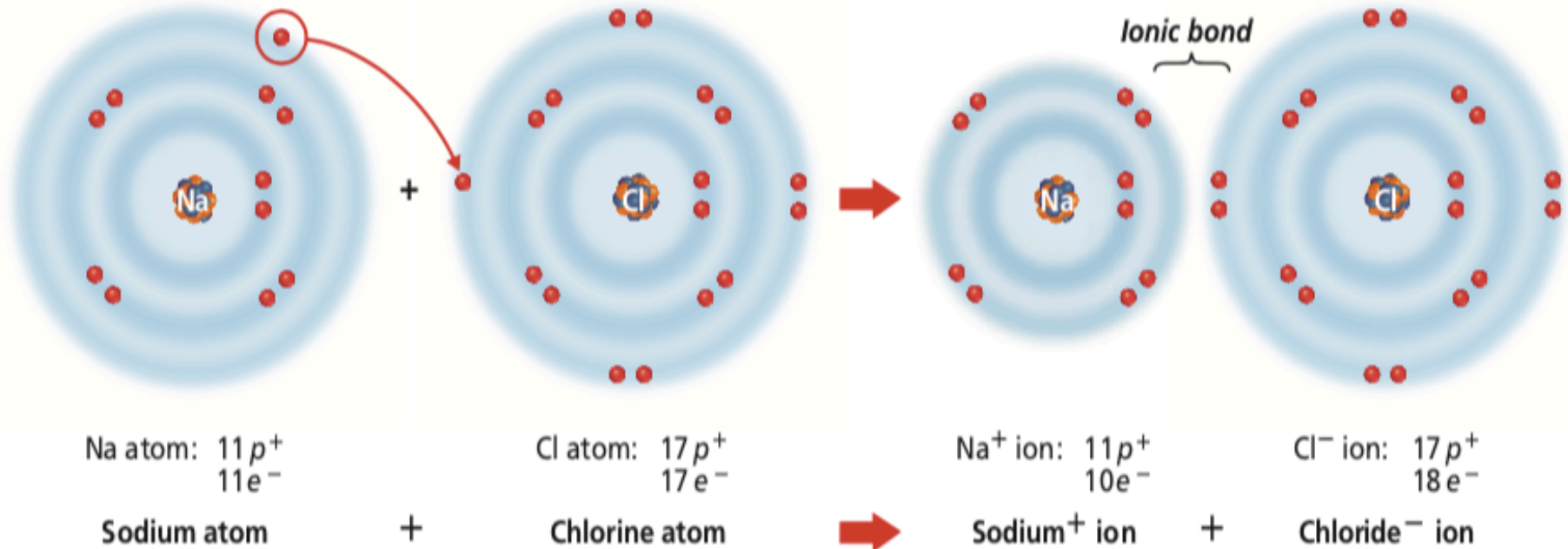
****Please take out your HW to be stamped****

1. Describe the difference between a covalent bond and an ionic bond.
2. Lemons have a pH of 2. Is this an acid or a base?
3. Complete: $C_6H_{12}O_6 + \underline{\quad} O_2 \rightarrow \underline{\quad} CO_2 + \underline{\quad} H_2O$

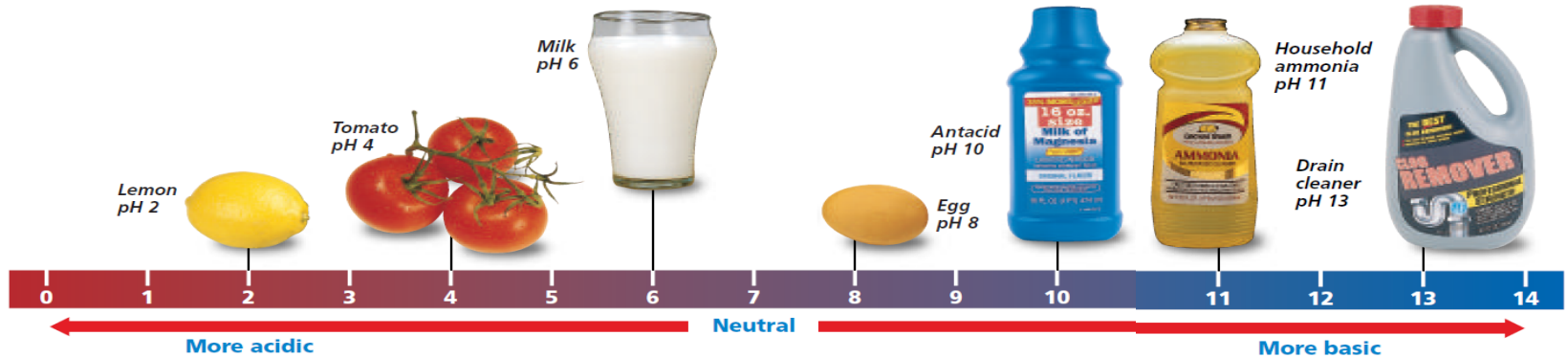
Covalent Bond



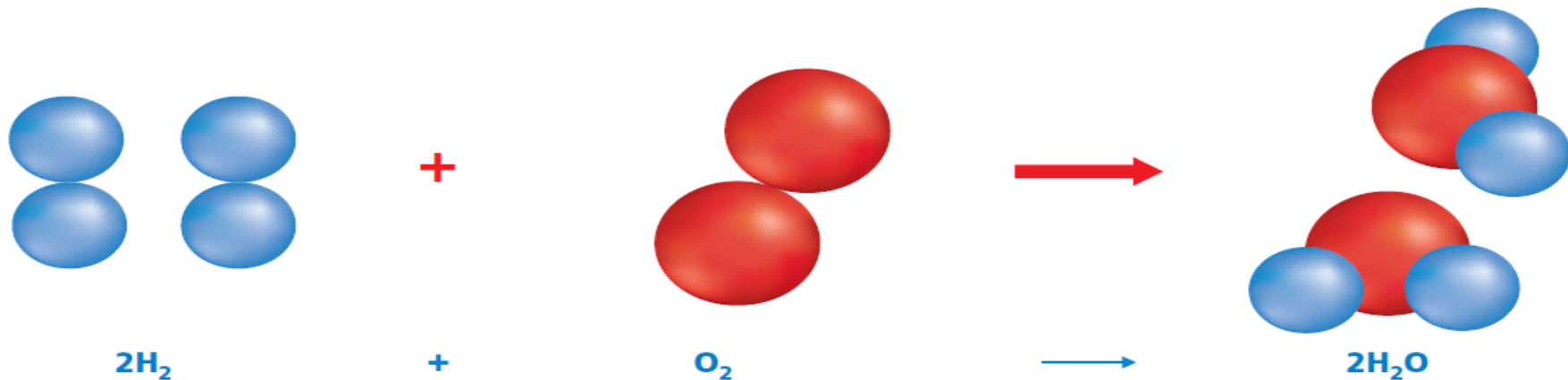
Ionic Bond



pH Scale



Balancing Equations

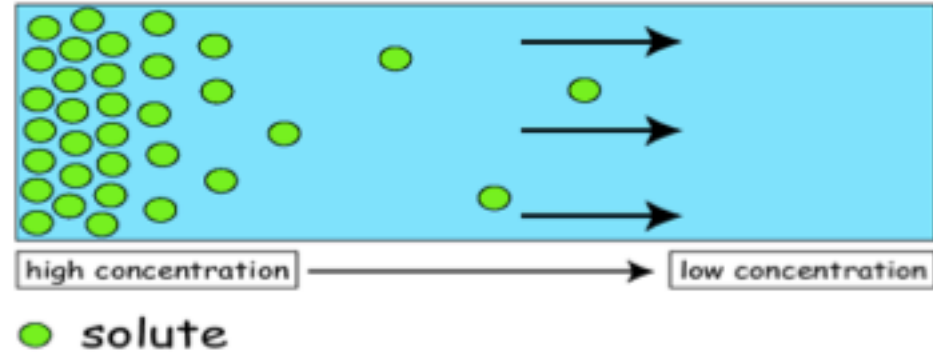
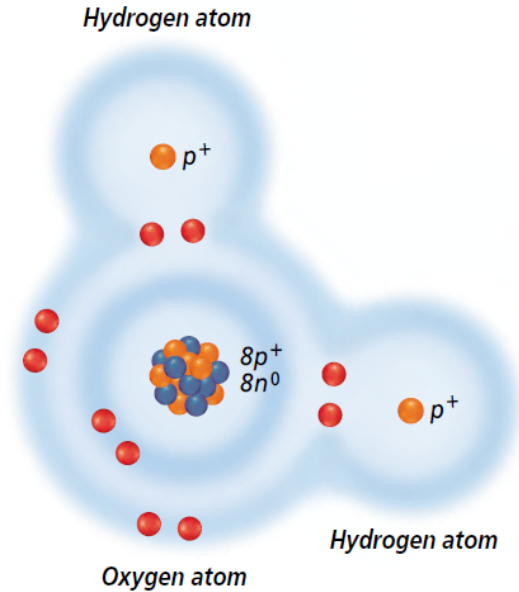


Agenda

- Warm Up
- Grade HW
- 6.2 Notes: Water and Diffusion
- Lab: Observing Diffusion

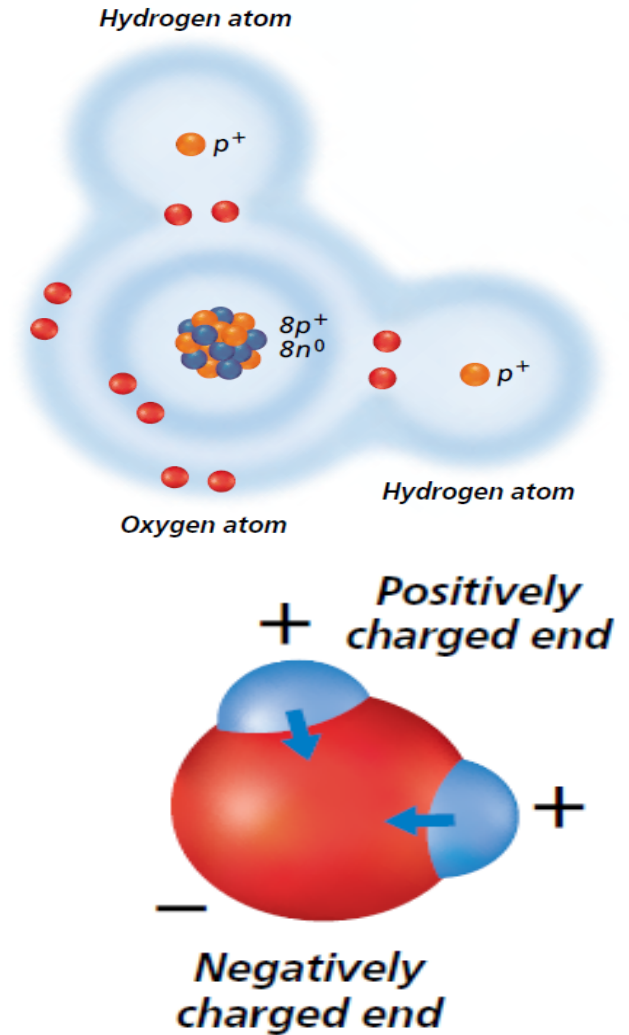
Homework: Read 6.2 and finish lab (Due Fri)

6.2: Water and Diffusion



Water is Polar

- Unequal distribution of charge
 - Shared electrons are attracted to the oxygen nucleus stronger than the hydrogen nuclei



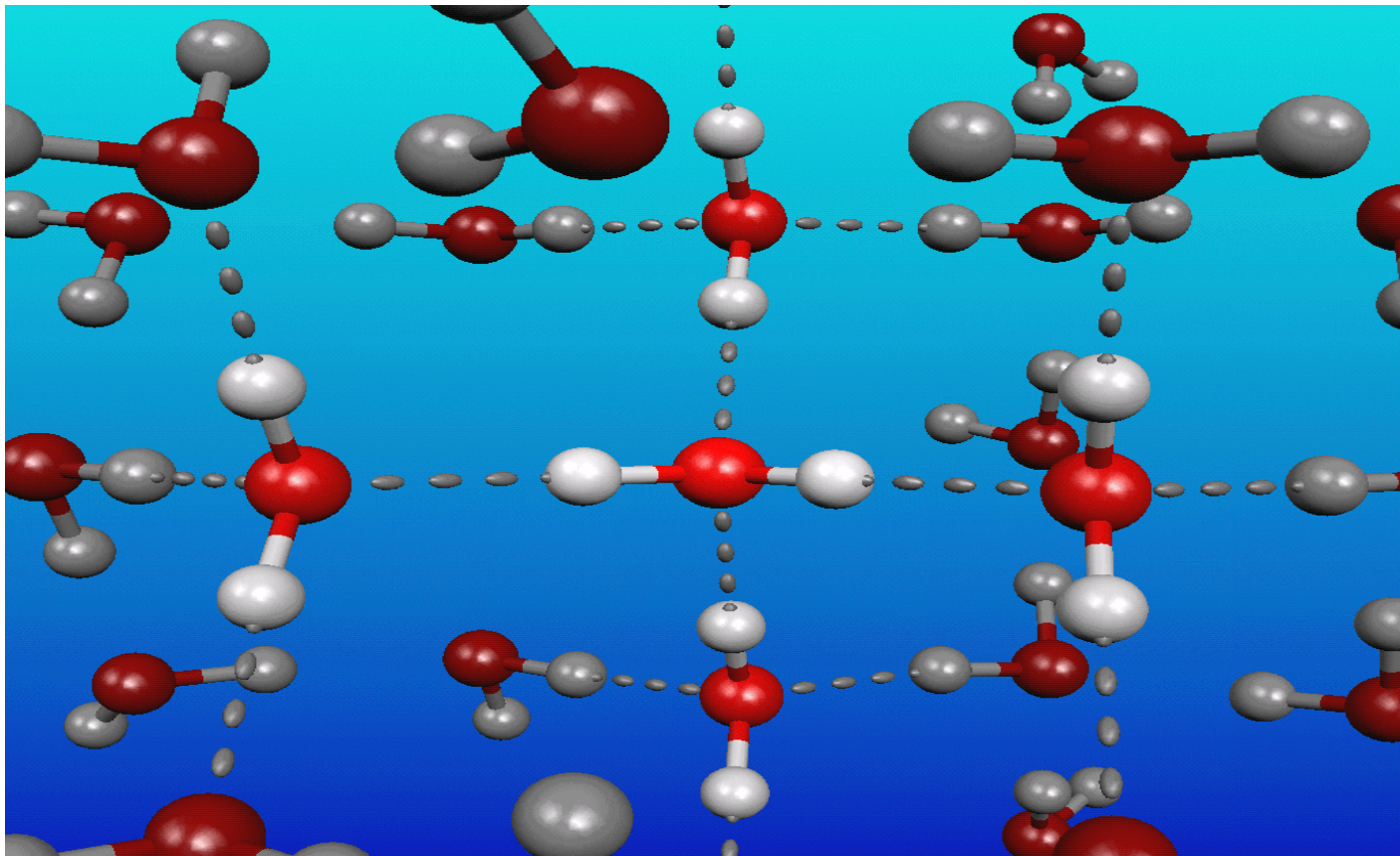
- Positive and negative end
 - excellent solvent
 - attracts other water molecules (hydrogen bond= weak bond between H₂O molecules
 - surface tension
 - how water can climb up plants

<https://youtu.be/ASLUY2U1M-8>

Mini Lab

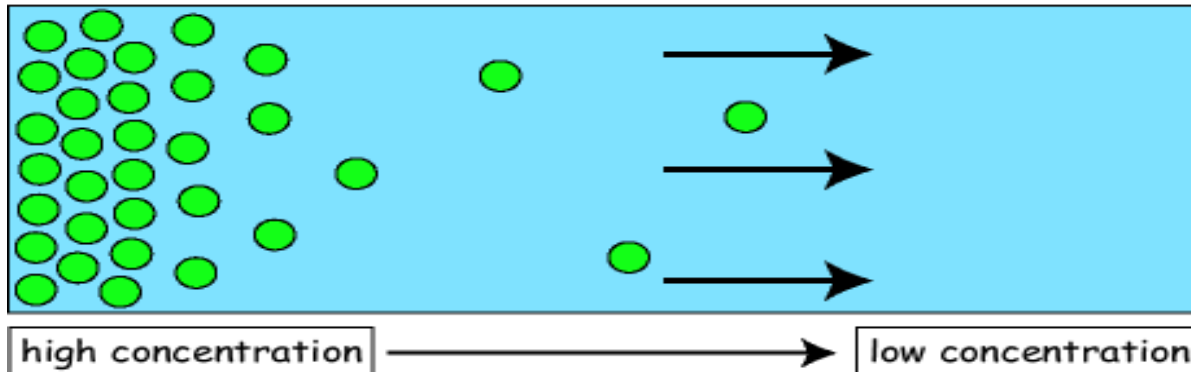
- Work with elbow partner
- Take a penny and a water dropper from the center table
- Using the dropper, count how many drops of water you can balance on the surface of the penny
- Record your number in your notes and return pennies and Droppers when finished

Hydrogen Bonds



Diffusion

- **Diffusion** is the net movement of particles from an area of higher concentration to an area of lower concentration. ***Due to random movement of particles**



● solute

Affected by:
Concentration,
Temperature,
and Pressure

*Food dye demo

Dynamic Equilibrium

- Continuous particle movement but no overall concentration change

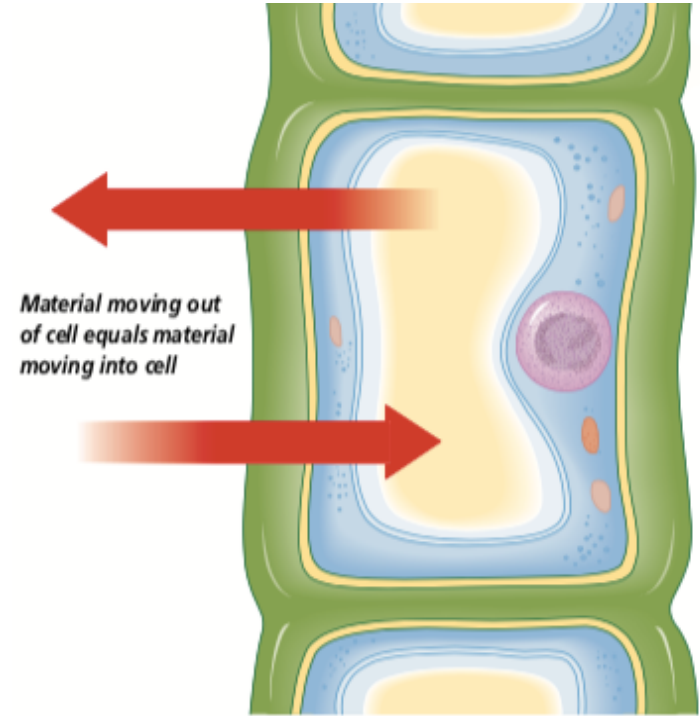


Figure 6.15

When a cell is in dynamic equilibrium with its environment, materials move into and out of the cell at equal rates. As a result, there is no net change in concentration inside or outside the cell.