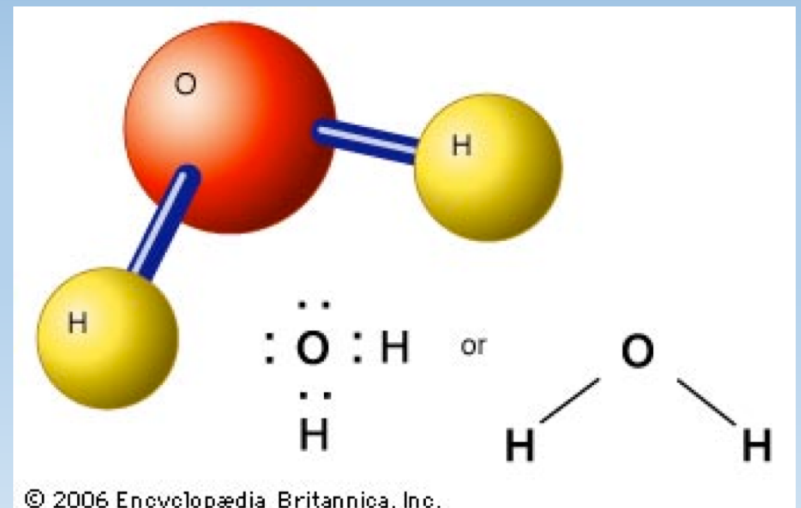


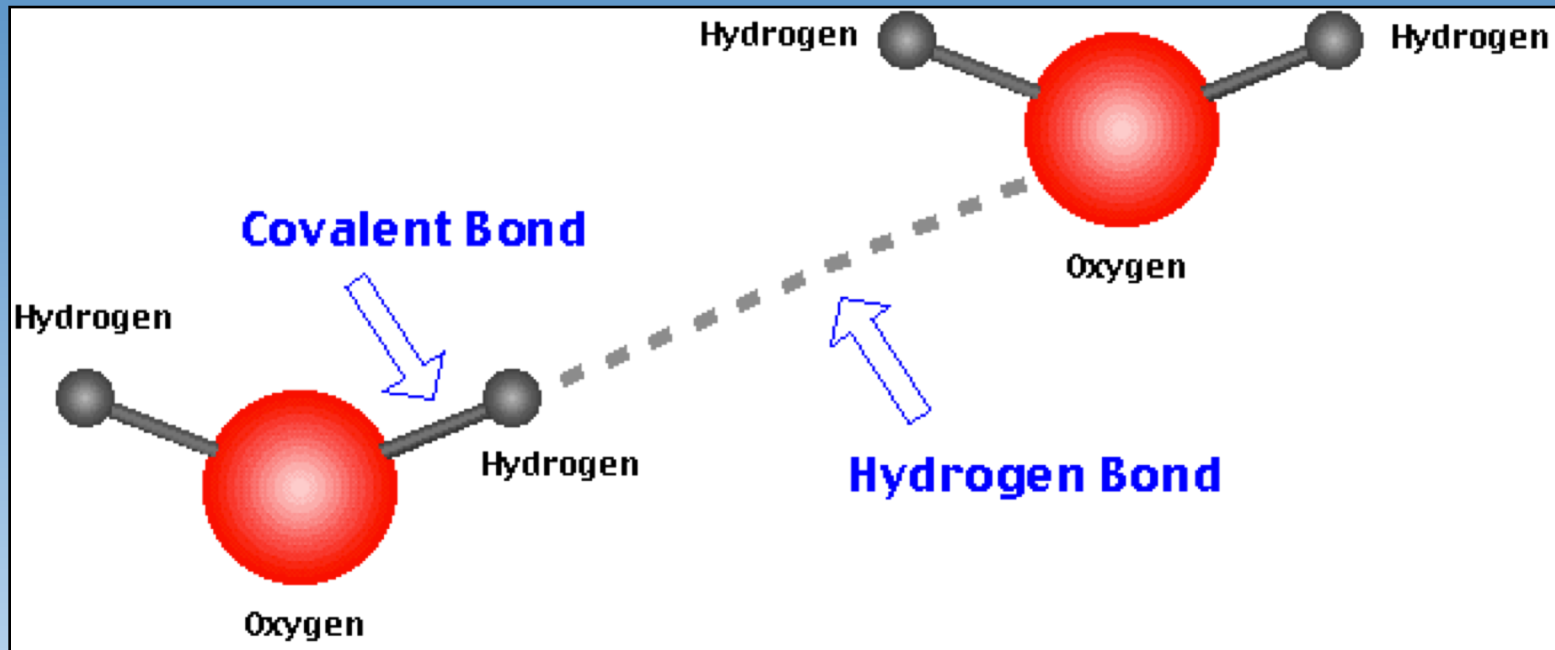
Ch 2.2: Properties of Water

Essential Questions:

- How does the structure of water molecules contribute to its unique properties?
- How does water's polarity influence its properties as a solvent.?
- Why must cells buffer solutions against rapid pH changes?



- Polarity
 - hydrogen bond



- Special properties of water
 - Cohesion
 - Adhesion
 - Capillary action
 - Heat capacity
 - Water in living things



- Solutions & suspensions

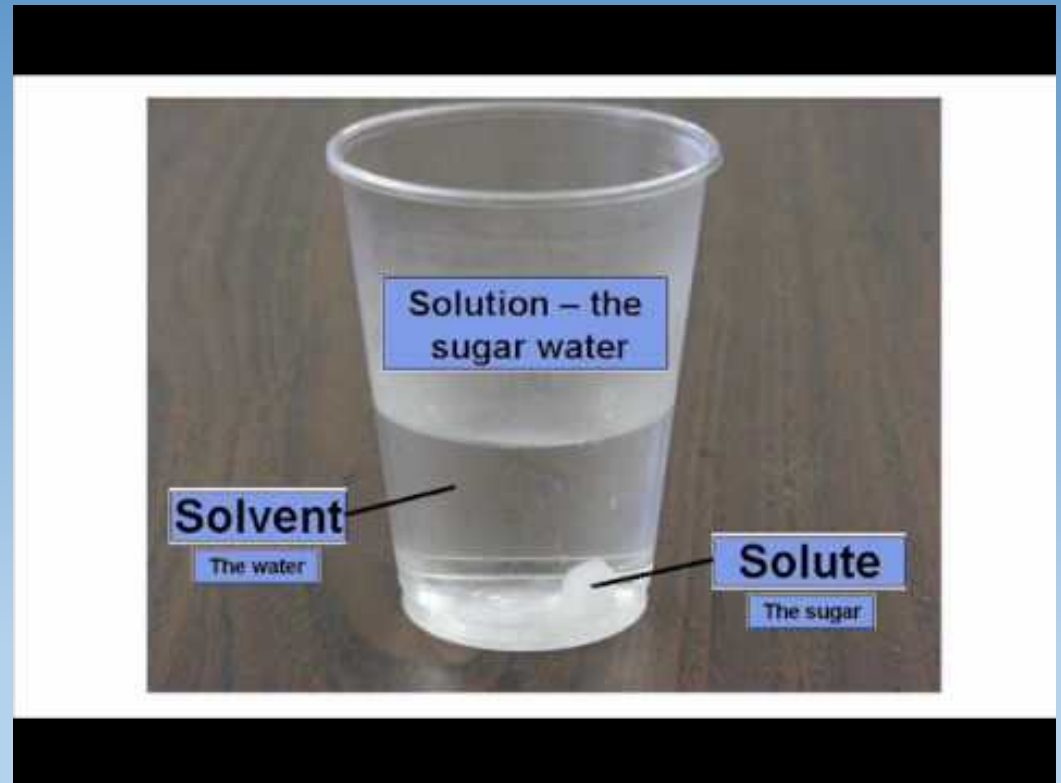
- Mixture

- Solution

- Solute

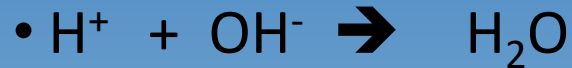
- Solvent

- Suspensions



- Acids, bases, pH

- Water can react to form ions



- Pure water = neutral

- Acid: forms H ions

- $[\text{H}^+] >$ pure water, $\text{pH} < 7$

- Base: forms OH^- ions

- $[\text{H}^+] <$ pure water, $\text{pH} > 7$

- Buffers

