

Chapter 3: Properties of Water

Lecture Outline

Bonding

- Polar Covalent

- Hydrogen

Properties and Behaviors of Water

- Polarity

- Cohesion

- Adhesion

- Capillary Action

- High Specific Heat of Water

- Frozen water is less dense than liquid water

- Water is the “universal” solvent

- Like Dissolves Like

- Hydrophilic substances

- Hydrophobic substances

- pH
 - $[H^+] = [OH^-] \rightarrow$ neutral
 - $[H^+] > [OH^-] \rightarrow$ acidic
 - $[H^+] < [OH^-] \rightarrow$ basic