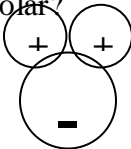


<p>Class Notes Topic: <u>Properties of Water</u> Questions/Main Idea:</p>	<p>Name: _____ Period: _____ Date: _____</p> <p style="text-align: center;">Notes:</p>
<p>What is a polar molecule?</p>	<ul style="list-style-type: none"> • Molecules that have slightly charged areas are called polar. • The charge is due to the uneven distribution of electrons between atoms
<p>Why is a water molecule polar?</p>  <p>Label water diagram with charges.</p>	<ul style="list-style-type: none"> • The oxygen atom with 8 protons in its nucleus has a stronger attraction for the shared electrons than the hydrogens with only 1 proton in each nucleus. • Therefore, the shared electrons will be closer to the oxygen. • This gives the oxygen a slightly negative charge and the two hydrogen atoms a slightly positive charge.
<p>What is cohesion?</p>	<ul style="list-style-type: none"> • Cohesion is a force which attracts molecules of the SAME substance. • The water molecules arrange themselves so that the positive end of one is next to the negative end of another molecule of water. These attractions are called hydrogen bonds. • The attraction between the polar water molecules is responsible for what is called surface tension.
<p>What is adhesion?</p>	<ul style="list-style-type: none"> • Attraction between two unlike substances such as water and glass is called adhesion. • When water sticks to a surface, it is because of the positive & negative forces between the two different substances involved. • Adhesion is responsible for capillary action, which is the force that draws water up roots to the rest of a plant.
<p>Why is water the universal solvent?</p>	<ul style="list-style-type: none"> • Water dissolves many different substances (solids, liquids, and gases). • One reason that water is able to dissolve many substances is that the charged ends of the water molecule attract the molecules of other polar substances.
<p>What is a mixture?</p>	<p>A mixture is a material composed of 2 or more elements or compounds that are physically mixed together but not chemically combined.</p>
<p>What is a solution?</p>	<p>A mixture that forms when all the components are evenly distributed within each other.</p>
<p>What is a solute?</p>	<p>A solute is a substance that is dissolved in a solution.</p>
<p>What is a solvent?</p>	<p>A solvent is a substance that does the dissolving in a solution.</p>
<p>What does the pH scale measure?</p>	<ul style="list-style-type: none"> • pH scale measures the concentration of H⁺ • It ranges from 0-14. • Each step on the pH scale increases by a factor of 10
<p>What is an acid?</p>	<ul style="list-style-type: none"> • Acidic solutions contain higher concentrations of H⁺ ions than pure water. • pH values are below 7
<p>What is a base?</p>	<ul style="list-style-type: none"> • Basic/Alkaline solutions contain lower concentrations of H⁺ ions than pure water. • pH values are above 7
<p>Summary:</p>	
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