

Water and Solutions

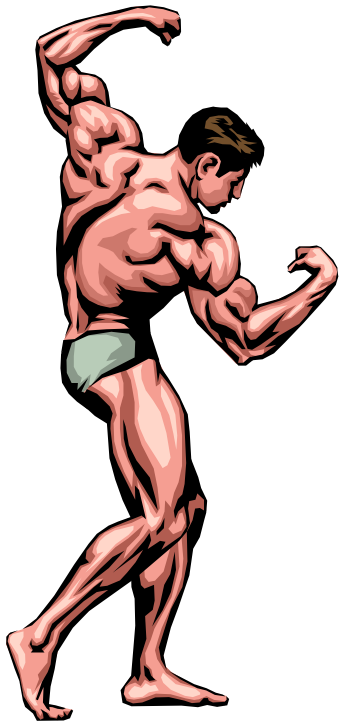
Section 6.3

SB1a,d

E? What properties of Water make it
INVALUABLE to Living Things?



Water



- _____ component of cells
- _____% of the _____
- _____ filled with water
- Helps move _____ and _____.

Why is it important?

- Stores _____ efficiently
 - _____ helps maintain a controlled temperature
 - Maintains _____.

Why is it important? Cont.

- Bond to _____ and other molecules
 - _____ - attraction between like molecules
 - _____ tension-
waters ability to “stick to itself”.
 - I.e: water striders can go across the top of water



Why is it important? Cont.





- _____ - when water forms _____ bonds with molecules on _____ surfaces
- Water _____ to another substance
 - _____ action- moving up a tube or stem

Why is it important? Cont.

- Dissolves many substances
 - Universal _____
 - _____ - a mixture in which one or more substances is evenly distributed in another

6.3 Water and Solutions

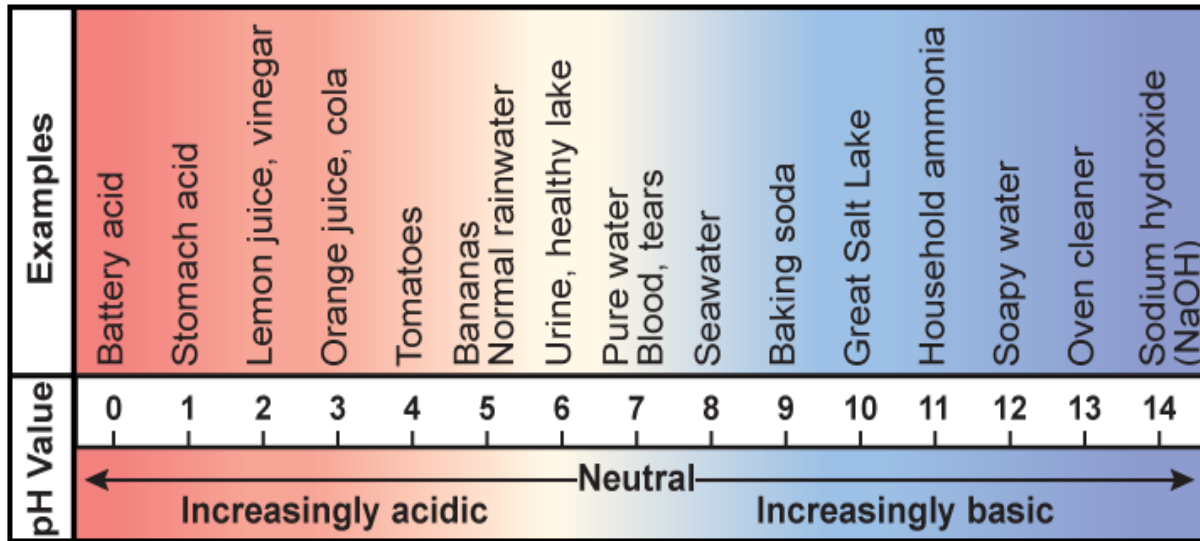
Water's Polarity

- Molecules that have an unequal distribution of charges are called _____ **molecules**. 
- _____ is the property of having two opposite poles.
- A _____ **bond** is a weak interaction involving a hydrogen atom and a fluorine, oxygen, or nitrogen atom. 

6.3 Water and Solutions

pH and Buffers

- The measure of concentration of _____ in a solution is called _____.



- _____ solutions have pH values _____
- _____ than 7. _____ solutions have pH values _____
- _____ than 7.

Why is it important? Cont.

- Acid/Base

- Acid- add

(H⁺) ions to water

- Base- add

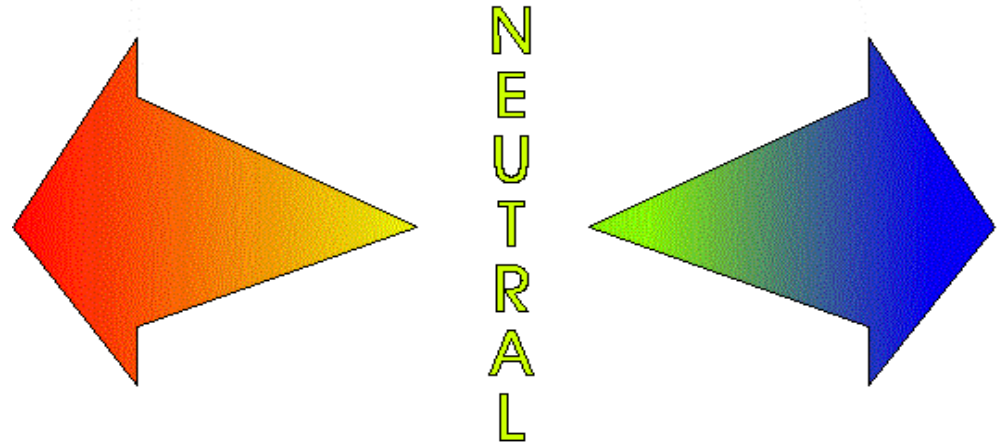
_ ions (OH⁻) to water

- _____ Scale measures the

of hydrogen ions in a solution

The pH Scale

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14



Stronger Acid **Stronger Alkali**

