

Name _____ Date _____ Period _____

CHEMISTRY OF LIFE - ASSIGNMENT 2

Properties of Water (pages 18-19)

Because of their _____ and _____ water molecules have many characteristics that benefit life. These are the 6 major benefits.

1. Water is _____ at room temperature. Compounds with low molecular weights are usually _____ at room temperature. Oxygen with a molecular weight of 32 is a _____ while water weights less (18) and is a _____. Water does not boil and become a gas until _____.
2. Water is the _____ and thereby facilitates chemical reactions both outside and inside our bodies. What causes salt (sodium chloride) ions to separate and to dissolve in water? _____
_____ ions and molecules that interact with water are said to be hydrophilic (water loving) while nonionized and nonpolar molecules are said to be _____ (water fearing).
3. Water molecules are _____ and therefore liquids will fill _____. Water molecules _____ together because of _____. This property allows water to be evenly distributed throughout the body. There fore water is an excellent _____ medium. Blood is _____ % water.
4. The temperature of liquid water rises and falls _____ preventing sudden or drastic changes. _____ that link water together allows water to absorb a great deal of _____ before it boils. This is a bout _____ the amount of heat required for other liquids. Water holds heat, and its temperature falls _____. Water protects us and other organisms from rapid temperature changes. Water is a good temperature _____.
5. Water keeps the body from _____. It takes a long amount of heat energy to change water to steam (_____) calories. Animals sweat and the body as the body heat is used to _____ sweat. The control of body temperature is an example of _____.
6. Frozen water is _____ dense than liquid water so that ice floats on water. This occurs because _____ becomes more rigid but also more _____. Water freezes from the _____ down. Ice acts as an _____ to protect aquatic organisms below form freezing.

WATER is AMAZING!!!!

It makes life as we know it possible!!!!