Anatomy and Physiology 12 Checkpoint

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This checkpoint is designed to check your understanding of properties of water, acids, and bases.

1. H2O (water) molecules are made up of **polar covalent bonds**. What does this mean?

*Polar means there is a difference in electronegativity between the molecules.*

*Covalent – means two atoms are sharing electrons*

1. Oxygen has a high **electronegativity.** Draw a diagram of a water molecule and describe how the **high electronegativity** impacts the properties of water.

*High Electronegativity leads to hydrogen bonding, makes water a good solvent, creates partial charges.*



1. Surface Tension is a result of hydrogen bonding. Why do hydrogen bonds form between water molecules?

*Hydrogen bonds form because of the partial charges on the Oxygen atom and the Hydrogen atoms.*

*These are caused by electronegativity.*