BIO 2510 SS 10 Ch Worksheet <Chapter 2: Worksheet 1 ANSWER KEY Sr Leader: Erica Dieterich

1. Small insects have the ability to walk on water because of the water property known as _____Cohesion_____.
2. An unstable nucleus is an indication of an _____isotope_____. To correct this imbalance, we expect the nucleus to break up in a process described as _____radioactive decay_____.
3. The Octet Rule is satisfied if _____there are 8 electrons in the outermost energy level; therefore, atoms are not looking to accept non-donate any electrons_____.
4. The _____covalent_____ bond is ideal for forming molecules because it is strong and directional.
5. Reactive atoms have _____unfilled energy levels_____.
6. In a bond, when one nucleus has a higher affinity (attraction) for electrons than the other, we refer to it as a ___Polar____ ___Covalent___ bond.
7. At low temperatures the Hydrogen bonds of water molecules are ___less____ likely to break, resulting in the formation of _____ice_____; however, at high temperatures the Hydrogen bonds of water molecules are ___more___ likely to break, resulting in the formation of ___gas___.
8. Which property of water prevents our blood from freezing, therefore allowing our body to remain a constant temperature? _____Heat Storage_____
9. As water freezes the molecules of water become ___farther apart___ from one another, making ice ___less___ dense than water.
10. When water dissociates it forms _____OH_____ and _____H_____.
11. pH measures the concentration of _____H_____.
12. You are examining a cell with environmental pH of 8. You want to make the environment more acidic. What are you going to do to the pH? _____How are going to increase it by raising the concentration of H+ in the cell's environment_____
13. What term do we use to describe an atom with an unequal amount of protons and electrons? _____Ions_____
14. A cation has _____more_____ protons than electrons, giving it a _____positive charge_____. An anion has _____fewer_____ protons than electrons, giving it a _____negative charge_____.
15. Chemicals that help keep pH in a normal range are called _____buffers_____.