Chapter 2 "The Chemistry of Life"
Worksheet ANSWERS

Section Review 2-1

1. Protons; neutrons
2. electrons
3. neutrons
4. electrons
5. ionic
6. The two main types of chemical bonds are ionic and covalent bonds
7. At atom becomes an ion when it gains or loses electrons
8. Electrons and protons are both subatomic particles; however, they have different charges and locations within the atom.
9. When atoms are joined together by covalent bonds, the structure that results is a molecule.
10. The property of radioactive isotopes that is useful for dating is that they break down at a constant rate over time.

Section Review 2-2

1. a
2. b
3. c
4. c
5. a
6. b
7. c
8. Polarity in a water molecule is caused by an uneven distribution of electrons between the oxygen and hydrogen atoms.
9. the concentration of H+ ions determines whether a solution is acidic or basic
10. Capillary action is the effect of water rising in a narrow tube against the force of gravity.
11. Two types of mixtures are solutions and suspensions
12. A base is a compound that can form a basic solution when dissolved.
13. Acidic solutions have a lower pH than pure water. This is due to the greater concentration of H+ ions than pure water.
14. Strong acids and bases are dangerous to cells. Buffers are dissolved compounds that help prevent sharp, sudden swings in pH.