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

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Score: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Biology Test – Module #5

Matching: Match each term with the correct definition.

|  |  |
| --- | --- |
| 1. \_\_\_\_ matter | 1. The random motion of molecules from an area of high concentration to an area of low concentration |
| 1. \_\_\_\_ molecules | 1. A substance that alters the speed of a chemical reaction but is not used up in the process. |
| 1. \_\_\_\_ physical change | 1. An explanation or representation of something that cannot be seen. |
| 1. \_\_\_\_ chemical change | 1. A change that affects the appearance but not the chemical makeup of a substance |
| 1. \_\_\_\_ catalyst | 1. A collection of atoms that all have the same number of protons. |
| 1. \_\_\_\_ diffusion | 1. A membrane that allows some molecules to pass through but does not allow other molecules to pass through. |
| 1. \_\_\_\_ element | 1. Anything that has mass and takes up space |
| 1. \_\_\_\_ semipermeable membrane | 1. The tendency of a solvent to travel across a semipermeable membrane into areas of higher solute concentration |
| 1. \_\_\_\_ osmosis | 1. A change that alters the makeup of the elements of molecules of a substance |
| 1. \_\_\_\_ model | 1. Chemicals that result from atoms linking together |

Multiple choice: Determine which option is the best answer to each question.

1. \_\_\_\_ Atoms are made of all of the following EXCEPT…
   1. Electrons
   2. Protons
   3. Positrons
   4. Neutrons
2. \_\_\_\_ Which of the following have a positive charge?
   1. Electrons
   2. Protons
   3. Positrons
   4. Neutrons
3. \_\_\_\_ Which part of the atom is at the center of the atom?
   1. Hydrogen
   2. Organelle
   3. Nucleus
   4. Mitochondria
4. \_\_\_\_ The particles that make up protons and neutrons are called…?
   1. Quirkles
   2. Sparks
   3. Quartz
   4. Quarks
5. \_\_\_\_ Which of the following is NOT a state of matter?
   1. Solid
   2. Ice
   3. Liquid
   4. Gas

True or false: Determine whether each statement is true or false.

1. \_\_\_\_ The atomic number of an element equals the number of protons in that element.
2. \_\_\_\_ Matter cannot be created or destroyed.
3. \_\_\_\_ Diffusion always moves from areas of low concentration to areas of high concentration.
4. \_\_\_\_ An acid has a pH of 7-14.
5. \_\_\_\_ Most acids are slippery.
6. \_\_\_\_ The pH scale ranges from -14 to 14.
7. \_\_\_\_ If you mix a base with a acid, the result is an acid.

Write A for acid, B for base, or N for neutral.

1. \_\_\_\_ pH 8
2. \_\_\_\_ pH 13
3. \_\_\_\_ pH 1
4. \_\_\_\_ pH 9
5. \_\_\_\_ pH 4
6. \_\_\_\_ pH 7