

Name: _____

Period: _____

Unit 2: Chemistry

Test Review

1. List the three states of matter.
2. Describe an atom in terms of its nucleus, valence, shell, electrons, protons, and neutrons.
3. Define the term element and identify the four major elements in the body.
4. Define the following terms:
 - a. compound:
 - b. molecule:
5. Define the following terms:
 - a. ion:
 - b. cation:
 - c. anion:
6. Describe the characteristics of the following types of bonds:
 - a. ionic:
 - b. covalent:
 - c. hydrogen:
7. Define pH.
8. Given the pH of a solution, categorize it as acidic, basic, or neutral.
 - a. 7.0
 - b. 14.0
 - c. 5.5
 - d. 1.0
 - e. 7.35

9. What is the pH of blood? _____ Is this acidic, basic or neutral?
10. Describe the properties of water that make it so valuable to the human body.
11. Define the following terms:
- a. organic:

 - b. inorganic:
12. Draw the structures and identify the functions of carbohydrates, proteins, lipids, and nucleic acids.
- a. Carbohydrates
 - b. proteins
 - c. lipids

Function:

Function:

Function:

13. Describe the $\text{ATP} \rightarrow \text{ADP} + \text{P}_i + \text{ENERGY}$ conversion which occurs when the body needs energy and when the body stores energy.