

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

**Ms. Randall Anatomy and Physiology**  
**Unit 2 Review Guide - Biochemistry**

1. Define and use the following terms:

- |                 |                  |
|-----------------|------------------|
| • Atom          | • monomer        |
| • carbohydrate  | • neutron        |
| • catalyst      | • nucleic acid   |
| • reaction      | • organic        |
| • covalent bond | • polar molecule |
| • electron      | • polymer        |
| • enzyme        | • protein        |
| • hydrogen bond | • proton         |
| • lipid         | • substrate      |

2. List the parts of an *atom* and their charges

3. Describe the processes which allow *monomers* to be joined to form *polymers* as well as polymers to be broken down into monomers.

4. Compare and contrast the structure and function of *carbohydrates*, *lipids*, *proteins*, and *nucleic acids*

5. Describe the function of *enzymes* and give an example of an enzymatic reaction in a living thing

6. Describe the structure and properties of a water molecule, including its *polarity*

7. Describe how the properties of water allow life on earth to be supported.

8. Describe the difference between metabolic and respiratory acidosis/alkalosis and an example of each.

9. Define and apply the pH scale.