

Topic: Chemistry of Life Study Guide

Summary: Students will fill out a worksheet with information on what they will be tested on. Macromolecules are not discussed in this study guide.

Goals & Objectives: Students will be able to define and explain the basics of chemistry including bonding, water, and acids and bases.

Time Length: 20 minutes

Standards: CA Chemistry 1, 2, 5, 6, 10.

Materials:

Textbook, class notes, and pencil or pen

Procedures:

Hand out this worksheet before introducing the chemistry of life. Students are to fill in this worksheet while you teach about chemistry. Students then use this worksheet as a central place to study from to prepare for a test or quiz.

Accommodations:

Students with an IEP may work with a partner filling in the definitions.

Evaluation:

Students are to keep this worksheet. It is not intended to be graded.

Chemistry of Life Study Guide

(Write definitions or explanations)

1. What makes up an atom? _____

2. How is an atom and element related? _____

3. What is a chemical reaction and how are reactants and products involved?

4. What is an ionic bond? _____
5. What is a covalent bond? _____
6. What does organic chemistry mean? _____
7. What is the chemical formula for water? _____ Draw the chemical structure of a water molecule to the right.

8. What is polarity? Explain how water is a polar molecule? _____

9. What is a hydrogen bond and what causes it? _____

10. What is cohesion? _____
11. What is adhesion? _____
12. What is a solution? _____

13. What is a solute? _____
14. What is a solvent? _____
15. What is an acid? _____
16. What is a base? _____
17. What is the pH scale? _____