

Name: _____ Date: _____ Biology Period: _____

Biochemistry of Life Flipbook

Standards: SB1. b-d

EQs being addressed: *How do the unique properties of water affect life?
What are the structures and functions of organic molecules?
Why are enzymes important for living things?*

Materials: 3 pieces of paper, Biochemistry notes, colored pencils

Required content:

1. **Title page:** Chemistry of Life, Name, Date & Period
5 points
2. **Properties of Carbon:** Describe the bonding properties of carbon that make it important for living things.
5 points
3. **Properties of Water:** Describe the four (4) properties of water and provide an example of each. Sketch the pH scale and indicate where to find acids and bases on the scale.
10 points
4. **Enzymes:** Discuss what enzymes do and how they do it. Discuss how the structure of an enzyme affects its function. Draw a picture of an enzyme and substrate then label the active site.
10 points
5. **Chemical Reactions:** Define and provide an example of a chemical reaction. Be sure to identify the reactants and products. Distinguish between endothermic and exothermic reactions.
10 points
6. **Carbon-Based Molecules:** Describe the functions of the 4 carbon-based macromolecules (carbohydrate, lipid, protein, nucleic acid) and list an example of each. Indicate the monomer for each.
12 points

Must be colorful, creative, and neat!!!

3 points