

Study Questions

CP Biology Test 1 – Chapter 2: Chemistry

1. Define and describe the structure of an atom
2. How is carbon unique and why is it important in living things
3. How are ions formed?
4. What happens to molecules during chemical reactions?
5. What is activation energy? How is it involved in chemical reactions?
6. How can you identify products and reactants in a chemical reaction?
7. What are the 4 classes of organic (carbon-based) macromolecules? Give examples of each.
8. What are the indicators used to test for macromolecules? How do they work?
9. Describe polar vs. non-polar molecules. Give examples of each
10. Describe the following properties of water: adhesion, cohesion, surface tension, specific heat
11. What is an enzyme and how does it work?
12. Explain how covalent and ionic bonds are formed.
13. Explain the terms molecule, compound, solution, solvent, and solute
14. Explain the pH and concentration of hydrogen ions of acids and bases. Give examples of each
15. What are the monomers that make up each of the 4 organic macromolecules?
16. Recognize the structure of each macromolecule and its monomer.
17. Describe the function of each of the 4 organic macromolecules