Biology Test 2 Study Guide

1. Know the difference between the reactants and products of a chemical reaction.
2. Know what endothermic and exothermic reactions are.
3. What is activation energy? What is a catalyst?
4. What is an enzyme?
5. What is a substrate and active site in relation to an enzyme?
6. Know how temperature, pH, and concentration effect enzyme activity.
7. Understand the geometry of a water molecule.
8. What is polarity?
9. What is hydrogen bonding?
10. Know how the geometry of a water molecule makes it polar and causes it to hydrogen bond with other water molecules.
11. What is cohesion and adhesion?
12. Know how temperature affects the density of water.
13. Why is most life based on the element carbon?
14. What is organic chemistry?
15. What is a macromolecule? What are the 4 kinds of biological macromolecules?
16. What is a monomer? What is a polymer?
17. What elements is a carbohydrate made of and in what ratio?
18. Know the difference between a monosaccharide and a disaccharide.
19. Why are carbohydrates used for in living things?
20. What are lipids and what elements are they made out of?
21. What are lipids used for in living things?
22. Know the difference between a saturated and an unsaturated fat.
23. What are nucleic acids used for in living things? What are two very important nucleic acids?
24. What elements are nucleic acids made out of?
25. What is a nucleotide? What are the 3 parts of a nucleotide?
26. What are proteins used for in living things? What elements are proteins made out of?
27. What monomers are proteins made out of?
28. What is a peptide bond? What is a polypeptide?