

Review Sheet for Unit 2 Exam – Biochemistry

1. Define matter.
2. Know the basic building blocks of matter.
3. Know the difference between an element, compound, and molecule.
4. Know what a subscript and a coefficient are when it comes to a chemical formula.
5. Understand the process of a chemical reaction
6. Define atomic number
7. Define atomic mass
8. Know what an isotope is
9. Know the difference between ionic and covalent bonding
10. Be able to identify the 5 characteristics of life
11. Know what the 4 most abundant elements are in the human body
12. Define inorganic and organic compounds
13. Understand why carbon is so special
14. Define polymerization
15. Know what the prefixes mono, di, and poly mean
16. Be familiar with the information in the Properties of Macromolecules table you constructed
17. Understand that there is a ratio of hydrogen to oxygen atoms in carbohydrates (just like you see in water)
18. Understand what makes carbohydrates with the same chemical formula different
19. Define dehydration synthesis
20. Be able to give an example of a mono, di, and polysaccharide
21. Be able to identify things that are made up of protein
22. Know how many amino acids there are
23. Know the difference between an amino acid and a protein
24. Know that function of a protein is determined by its shape and the order of amino acids determines the kind of protein it is
25. Be able to identify structural formulas for all of the macromolecules
26. Know that both proteins and lipids contain more H than O, and that lipids have an unusually high H content in general.
27. Know the difference between saturated and unsaturated fats
28. Define energy
29. Know the difference between potential and kinetic energy
30. Define metabolism
31. Define activation energy
32. Define enzymes
33. Define biological catalysts
34. Be able to describe how enzymes work
35. Know what a substrate is
36. Know what an active site is
37. Know what denaturation means
38. Know what a co-enzyme is, and its function
39. Know what an inhibitor is and what it does
40. Understand that temperature, pH, and concentration can all have an effect on an enzyme-substrate system
41. Understand the difference between energy releasing and energy absorbing reactions

RE-READ **ALL OF YOUR LABS** AND UNDERSTAND WHAT HAPPENED!!

(ASK ME IF YOU ARE CONFUSED ABOUT ANYTHING)

STUDY EACH NIGHT THIS WEEK—DON'T PROCRASTINATE UNTIL THE END—READ and REREAD YOUR NOTES; MUCH OF THIS INFORMATION IS IN THEM.