

Module 03 Quiz: Biomolecules

Name: _____ Date: _____

Part A: Multiple Choice (7 points)

Choose the best answer for each question. (1 point each)

1. The building blocks of proteins are:
 2. A) Nucleotides
 3. B) Monosaccharides
 4. C) Amino acids
 5. D) Fatty acids
6. Which reaction joins monomers together to form polymers?
 7. A) Hydrolysis
 8. B) Dehydration synthesis
 9. C) Oxidation
10. D) Neutralization
11. Which biomolecule makes up cell membranes and stores long-term energy?
 12. A) Carbohydrates
 13. B) Proteins
 14. C) Lipids
15. D) Nucleic acids
16. DNA and RNA are examples of:
 17. A) Lipids
 18. B) Carbohydrates

19. C) Proteins
20. D) Nucleic acids
21. Which polysaccharide is found in plant cell walls?
22. A) Glycogen
23. B) Starch
24. C) Cellulose
25. D) Chitin
26. The shape of a protein is MOST directly determined by:
27. A) Its amino acid sequence
28. B) The number of fatty acids
29. C) The number of nucleotides
30. D) Water content
31. An unsaturated fat differs from a saturated fat in that it contains:
32. A) No carbon atoms
33. B) Double bonds between carbons
34. C) Only single bonds
35. D) More hydrogen atoms
-

Part B: Free Response (3 points)

Answer each question in complete sentences.

1. (1 point) Explain the difference between dehydration synthesis and hydrolysis. When is each used in the body?
-
-

1. (1 point) Compare the structure and function of three different types of carbohydrates (monosaccharides, disaccharides, and polysaccharides).

1. (1 point) Why is protein shape important for protein function? What can cause a protein to lose its shape?
