

Macromolecules Review Worksheet for H Biology

Part A. Classify each as a carbohydrate, protein, or lipid.

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|-----------------------|-------------------|---|------------------------|
| 1. carbohydrate _____ | Starch | 9. carbohydrate _____ | Polysaccharide |
| 2. lipid _____ | Cholesterol | 10. lipid _____ | Phospholipid |
| 3. lipid _____ | Steroid | 11. neither, but is a key
component of a lipid _____ | Glycerol |
| 4. carbohydrate _____ | Glycogen | 12. carbohydrate _____ | Monosaccharide |
| 5. protein _____ | enzyme | 13. carbohydrate _____ | Cellulose |
| 6. lipid _____ | saturated fat | 14. protein _____ | amino acid |
| 7. protein _____ | polypeptide chain | 15. lipid _____ | unsaturated fatty acid |
| 8. carbohydrate _____ | Glucose | | |

Part B. Identify the specific molecule (use the above terms) from each description. Some terms may be used more than once.

16. lipids _____ provides long-term energy storage for animals
17. carbohydrate _____ provides immediate energy
18. lipids _____ sex hormones
19. carbohydrate _____ provides short-term energy storage for plants
20. protein _____ animal and plant structures
21. lipids _____ forms the cell membrane of all cells
22. protein _____ speeds up chemical reactions by lowering activation energy
23. carbohydrate _____ one sugar
24. protein (amino acids) _____ monomer of proteins
25. carbohydrate _____ provides long-term energy storage for plants
26. lipids _____ steroid that makes up part of the cell membranes
27. *glycerol (see above) _____ 3-carbon "backbone" of a fat
28. carbohydrate _____ provides short-term energy storage for animals
29. carbohydrate _____ many sugars
30. carbohydrate _____ forms the cell wall of plant cells

Part C. Which specific molecule (saturated fat, unsaturated fat, protein, glucose, starch, cellulose) is each food mostly made of?

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|---------------------|------------|---------------------|-------------|
| 31. starch _____ | almond | 39. cellulose _____ | celery |
| 32. cellulose _____ | spinach | 40. starch _____ | soy beans |
| 33. protein _____ | beef jerky | 41. glucose _____ | cranberries |