

Macromolecules Review Worksheet for H Biology

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

- | | | | |
|----------------------|-------------------|--|------------------------|
| 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?

- | | | | |
|--------------------|------------|--------------------|-------------|
| 31. starch_____ | almond | 39. cellulose_____ | celery |
| 32. cellulose_____ | spinach | 40. starch_____ | soy beans |
| 33. protein_____ | beef jerky | 41. glucose_____ | cranberries |