Macromolecules Worksheet **Name**: _____ **Block:** _____

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

1. _____ starch
2. _____ cholesterol
3. _____ steroid
4. _____ glycogen
5. _____ nucleotide
6. _____ RNA
7. _____ polypeptide chain
8. _____ glucose
9. _____ unsaturated fatty acid
10. _____ polysaccharide
11. _____ phospholipid
12. _____ glycerol
13. _____ monosaccharide
14. _____ cellulose
15. _____ amino acid
16. _____ enzyme
17. _____ saturated fat
18. _____ DNA

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

17. _____ provides long-term energy storage for animals
18. _____ instructions for building proteins
19. _____ provides immediate energy
20. _____ sex hormones
21. _____ provides short-term energy storage for plants
22. _____ animal and plant structures
23. _____ forms the cell membrane of all cells
24. _____ speeds up chemical reactions by lowering activation energy
25. _____ one sugar
26. _____ cells convert this into ATP
27. _____ monomer of proteins
28. _____ provides long-term energy storage for plants
29. _____ genetic material
30. _____ steroid that makes up part of the cell membranes
31. _____ 3-carbon “backbone” of a fat
32. _____ provides short-term energy storage for animals
33. _____ many sugars
34. _____ monomer of nucleic acids
35. _____ 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?*

36. _____ almond
37. _____ spinach
38. _____ beef jerky
39. _____ bacon
40. _____ noodles
41. _____ orange juice
42. _____ cheese
43. _____ wheat
44. _____ celery
45. _____ soy beans
46. _____ cranberries
47. _____ egg white
48. _____ table sugar
49. _____ popcorn
50. _____ lobster
51. _____ sesame oil

Part D. *State whether each is found in animals, plants or both.*

52. _____ saturated fat
53. _____ protein
54. _____ steroid
55. _____ amino acid
56. _____ DNA
57. _____ cellulose
58. _____ monosaccharide
61. _____ glucose
62. _____ RNA
63. _____ polysaccharide
64. _____ glycogen
65. _____ starch
66. _____ phospholipid
67. _____ enzyme

Part E. *Which food molecule (monosaccharide, polysaccharide, lipid, protein) would you eat if…*

68. …you needed a quick boost of energy? _____
69. …you wanted to grow strong nails? _____
70. …you haven't eaten in days? _____
71. …you wanted to grow healthy hair? _____
72. …you had a race tomorrow afternoon? _____
73. …you were getting ready for hibernation? _____
74. …you wanted to get bigger muscles? _____
75. …your next meal will be in a week? _____