

Categorizing Macromolecules of Life

Use the word list, your book(chapter 2.3 and 2.4) to categorize the vocabulary terms
The list is in alphabetical order. The words may be used under more than one category
and some may not be used at all.

Carbohydrates (at least 20)	Lipids (at least 18)	Proteins (at least 25)	Nucleic Acids (at least 20)
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27

Discussion Questions

1. What do all of the categories have in common?
2. What are the differences molecularly (type of atoms each has) between the 4 categories?
3. What are the functions of each category?
4. List the prefixes and suffixes that help you identify which group a molecule would belong.
5. Pair up the macromolecule with its monomer.
6. Explain what each macromolecule does in a living cell.

active site	galactose	oils organic
amino acid	glucose	oxygen
amino group	glycerol	peptide bond
carbon	glycogen	phosphate group
carbonic anhydrase	heredity	phosphorus
carboxyl group	hydrogen	polypeptide
catalyst	H:O ratio of 2:1	polysaccharide
cell membrane	H:O ratio not 2:1	polyunsaturated
cell structural material	inorganic	polymer
cellulose	instructions to make	ribose
chemical pump	proteins	RNA
in chromosomes	lactose	saturated
CH ₂ O	lock and key	speeds up reactions
deoxyribose	lowers activation energy	starch
disaccharide	macromolecules	stored energy
dipeptide	maltose	stores genetic
DNA	master molecule	information
Enzyme	monosaccharides	substrate
Fats	NH ₂	sucrose
Fatty acids	nitrogen	sugar
5 carbon sugar	nitrogenous base	affected by Temp
fructose	nucleotide	PH