

## Biomolecules Worksheet

1. What is a compound?
2. What is the main difference between organic and inorganic compounds?
3. What are carbohydrates used for in our bodies?
4. What is the monomer for carbohydrates?
5. What is a food that is considered a simple carbohydrate?  

A complex carbohydrate?
6. What three elements are in carbohydrates?
7. Name three types of lipids.
8. What 2 substances make up a lipid?
9. What do we use lipids for in our body?
10. What do we need in our diet for growth, maintenance and repair of our bodies?
11. What is the monomer (building block) of proteins?
12. Name 2 nucleic acids.

What is the function of nucleic acids?

**Matching: Answers are only used once. Do not draw lines.**

	13. Monosaccharide	A. Another term for lipids
	14. Polysaccharide	B. In hair, fingernails, hemoglobin
	15. Nucleic acids	C. Simplest sugar
	16. Protein	D. Chains of glucose stored in muscles
	17. Fats	E. Building blocks of proteins
	18. Organic	F. Most complex carbohydrate
	19. Glycogen	G. Contains carbon, found in all living things
	20. Amino acids	H. Most complex of organic compounds (largest)
	21. DNA	I. Nucleic acid

22. List in order the organic compounds from simple to most complex: Lipids, nucleic acids, carbs & protein.
23. Which organic compound does your body use for stored energy?
24. Which organic compound does your body use for quick energy?

25. Students are given data from an investigation that identified some of the chemical elements present in four different samples.

Elements Present in Samples

Sample	Elements
1	Hydrogen, phosphorus, and nitrogen
2	Aluminum, silicon, and copper
3	Calcium, potassium, and nitrogen
4	Iron, oxygen, and magnesium

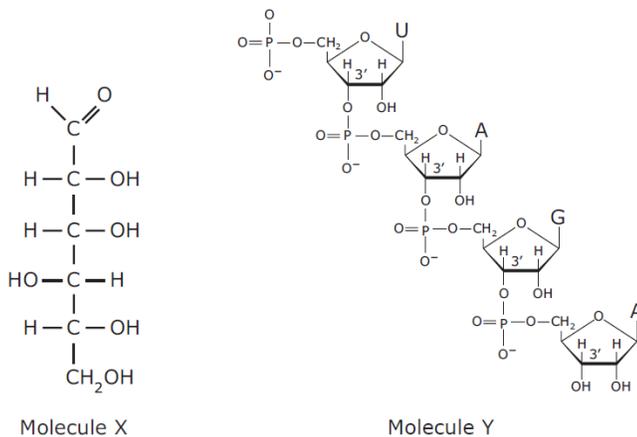
Which sample was most likely DNA?

- A. Sample 1
- B. Sample 2
- C. Sample 3
- D. Sample 4

26. An advertisement for a health supplement for dogs claims to build lean muscle and strengthen tendons and ligaments, as well as provide energy. Which two biomolecules must the supplement contain to provide these benefits?

- F. Carbohydrates and lipids
- G. Nucleic acids and carbohydrates
- H. Proteins and carbohydrates
- J. Lipids and nucleic acids

27. Two biomolecules are shown.



Which of the following best describes these biomolecules?

- A. Molecule X and Molecule Y are both carbohydrates.
- B. Molecule X is a nucleic acid, and Molecule Y is a carbohydrate.
- C. Molecule X and Molecule Y are both nucleic acids.
- D. Molecule X is a carbohydrate, and Molecule Y is a nucleic acid.