

Amazing Molecules of Life

Biochemistry · Answer Key · 18 Questions

1. What are the tiny building blocks that make up all living things?

- A) Atoms
- B) Molecules
- C) Cells**
- D) Organs

2. Which type of molecule is the main source of energy for our bodies, found in foods like bread and pasta?

- A) Proteins
- B) Fats
- C) Carbohydrates**
- D) Vitamins

3. Proteins are made up of smaller units called:

- A) Sugars
- B) Fatty acids
- C) Amino acids**
- D) Nucleotides

4. What molecule carries the instructions for building and operating a living thing, like a recipe book?

- A) RNA
- B) DNA**
- C) ATP
- D) Glucose

5. Where does a plant get the energy to make its own food through photosynthesis?

- A) Soil
- B) Water
- C) Sunlight**
- D) Oxygen

6. What is the name for the special molecules in our bodies that help speed up chemical reactions, like tiny helpers?

- A) Hormones
- B) Enzymes**
- C) Antibodies
- D) Minerals

7. Which important molecule is found in fruits and vegetables and helps our bodies stay healthy and fight off sickness?

- A) Sugar
- B) Salt
- C) Vitamins**
- D) Water

8. What is the main liquid that makes up a large part of our bodies and is essential for life?

- A) Milk
- B) Juice
- C) Oil
- D) Water**

9. Fats are important for storing energy and protecting our organs. What are the building blocks of fats called?

- A) Amino acids
- B) Sugars
- C) Fatty acids and glycerol**
- D) Nucleotides

10. What is the name of the molecule that acts like the 'energy currency' for cells, powering their activities?

- A) Glucose
- B) DNA
- C) ATP**
- D) Protein

11. What process do plants use to convert light energy into chemical energy in the form of sugar?

- A) Respiration
- B) Digestion
- C) Photosynthesis**
- D) Fermentation

12. Which of these is a simple sugar that is a primary source of energy for cells?

- A) Starch
- B) Cellulose
- C) Fructose**
- D) Protein

13. What are the basic units of nucleic acids, like DNA and RNA, called?

- A) Amino acids
- B) Fatty acids
- C) Nucleotides**
- D) Sugars

14. What is the role of enzymes in living organisms?

- A) Storing energy
- B) Building new cells
- C) Speeding up chemical reactions**
- D) Carrying genetic information

15. Which group of molecules includes things like cholesterol and sex hormones?

- A) Carbohydrates
- B) Proteins
- C) Nucleic acids
- D) Lipids (Fats)**

16. What gas do living things breathe in for energy production, and what gas do they breathe out?

- A) Oxygen in, Carbon dioxide out**
- B) Carbon dioxide in, Oxygen out
- C) Nitrogen in, Oxygen out
- D) Oxygen in, Nitrogen out

17. What are the main components that make up a cell membrane, controlling what enters and leaves the cell?

- A) Proteins and carbohydrates
- B) Lipids (fats) and proteins**
- C) Nucleic acids and lipids
- D) Water and minerals

18. When we eat food, our bodies break it down into smaller molecules. What is this process called?

- A) Photosynthesis
- B) Digestion**
- C) Respiration
- D) Synthesis