

Organic Chemistry Adventures

Organic Chemistry · Answer Key · 25 Questions

1. What element is the main building block of all organic compounds?

- A) Oxygen
- B) Nitrogen
- C) Carbon**
- D) Hydrogen

2. Which of these is an example of an organic compound found in fruits like bananas and apples?

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

3. What common substance do we breathe out that is an organic compound?

- A) Oxygen
- B) Nitrogen
- C) Carbon Dioxide**
- D) Helium

4. The long chains of carbon atoms in organic molecules are often called a molecule's what?

- A) Ribs
- B) Skeleton**
- C) Spine
- D) Framework

5. What type of organic molecule is the primary source of energy for our bodies and is found in foods like bread and pasta?

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

6. Which of these is a very simple organic molecule made of only carbon and hydrogen atoms?

- A) Water
- B) Ammonia
- C) Methane**
- D) Sulfuric Acid

7. What are the tiny building blocks that make up proteins, which are essential for our bodies to grow and repair?

A) Nucleotides

B) Amino acids

C) Sugars

D) Fatty acids

8. The plastic used to make many toys and containers is an example of a large organic molecule called a what?

A) Polymer

B) Monomer

C) Element

D) Compound

9. Which of these is an organic compound that helps keep our bodies healthy and is often found in vegetables and fruits?

A) Salt

B) Iron

C) Vitamins

D) Calcium

10. What is the primary organic molecule that makes up living things, like plants and animals?

A) Minerals

B) Metals

C) Organic matter

D) Inorganic matter

11. The smell of flowers and the taste of many foods are due to different types of organic molecules called what?

A) Acids

B) Bases

C) Esters

D) Salts

12. What do we call organic compounds that contain both carbon and oxygen, and are often used as solvents or in cleaning products?

A) Alcohols

B) Aldehydes

C) Ketones

D) Ethers

13. Which of these is a very common organic molecule that is essential for life and makes up a large part of our bodies?

- A) Methane
- B) Ethanol
- C) Glucose**
- D) Propane

14. The natural gas that is used for heating homes is mostly made up of an organic compound called what?

- A) Ethane
- B) Propane
- C) Butane
- D) Methane**

15. What are the organic molecules that form the basis of DNA and RNA, which carry genetic information?

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

16. Which organic molecule is found in fats and oils and is important for storing energy in our bodies?

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

17. The substance that gives many plants their green color and is used in photosynthesis is an organic molecule called what?

- A) Melanin
- B) Carotene
- C) Chlorophyll**
- D) Hemoglobin

18. What type of organic reaction involves combining two molecules to form a larger one, often releasing a smaller molecule like water?

- A) Dehydration synthesis**
- B) Hydrolysis
- C) Combustion
- D) Oxidation

19. Which common organic compound, also known as rubbing alcohol, is used as a disinfectant?

- A) Methanol
- B) Ethanol
- C) Isopropanol**
- D) Acetone

20. What are the organic molecules that make up the building blocks of fats and cell membranes called?

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

21. The process by which plants make their own food using sunlight, water, and carbon dioxide is called photosynthesis, and it produces organic sugar. What is the scientific term for this sugar?

- A) Sucrose
- B) Fructose
- C) Glucose**
- D) Lactose

22. Which organic compound is responsible for the characteristic smell and taste of vanilla?

- A) Cinnamon
- B) Vanillin**
- C) Citral
- D) Limonene

23. The organic compound that gives chili peppers their spicy heat is called what?

- A) Piperine
- B) Capsaicin**
- C) Lycopene
- D) Anthocyanin

24. What is the name for organic compounds that contain a benzene ring, which is a six-carbon ring with alternating double bonds?

- A) Alkanes
- B) Alkenes
- C) Aromatics**
- D) Alcohols

25. The organic molecule that gives many fruits their sweet taste and is also a simple sugar is called what?

- A) Maltose
- B) Sucrose
- C) Fructose**
- D) Lactose