

Carbon Chemistry ▪ *Reading/Notetaking Guide***Life With Carbon** (pp. 316–323)

This section describes the four main classes of polymers in living things.

Use Target Reading Skills

The information in this book is organized with red headings and blue subheadings. Before you read, preview each red heading and blue subheading. Ask a question for each red heading to guide you as you read the topic. Answer the questions as you read.

Life With Carbon		
Heading	Question	Answer
Carbohydrates	What is a carbohydrate?	
Proteins		
Lipids		
Nucleic Acids		
Other Nutrients		

Introduction (pp. 316–317)

1. What are the four classes of polymers found in all living things?

Carbohydrates (pp. 317–318)

2. What is a carbohydrate?

3. The sugar with the molecular formula of $C_6H_{12}O_6$ is called

_____.

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4. Why is glucose sometimes called “blood sugar”?

5. A large chainlike molecule made of simple carbohydrates is called a(n) _____.

6. Complete the table about complex carbohydrates.

Complex Carbohydrates		
Type	Description	Contained in These Foods
a. Starch		
b. Cellulose		

Proteins (p. 319)

7. Polymers formed from smaller molecules called amino acids are _____.

8. Is the following sentence true or false? All amino acid molecules contain a carboxyl group (—COOH) and an amino group (—NH_2).

9. How are different proteins made?

10. Circle the letter of each food that is a good source of protein.

a. fish b. beans c. potatoes d. meat

11. What does the body use proteins for?

Carbon Chemistry ▪ *Reading/Notetaking Guide***Life With Carbon** *(continued)***Lipids** (pp. 320–321)

12. What are lipids?

13. Name four types of lipids.

14. Gram for gram, which stores more energy, lipids or carbohydrates?

15. What is each fat or oil made of?

Nucleic Acids (pp. 321–322)

16. What are nucleic acids?

17. Complete the table about types of nucleic acids.

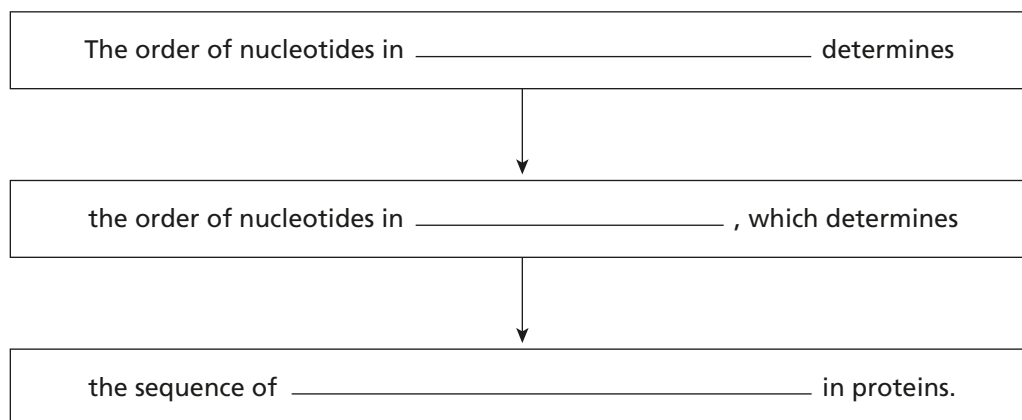
Nucleic Acids		
Common Name	Full Name	Composed of
a.	Deoxyribonucleic acid	Four kinds of
b.	Ribonucleic acid	Four kinds of

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18. The building blocks of nucleic acids are called _____.

19. What do the differences among living things depend on?

20. Complete the flowchart about nucleic acids.



Other Nutrients (pp. 322–323)

21. Complete the table about other compounds in foods.

Vitamins and Minerals		
Nutrient	Definition	Examples
a. Vitamins		
b. Minerals		

22. Is the following sentence true or false? Vitamins and minerals are only needed by your body in small amounts. _____

