Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_

**CARBON CYCLE BOOK SEARCH**

*First, let’s get a textbook! Next, use the page numbers provided to identify the pages you will read to answer each set of questions below.*

**PAGE 45**

1. What is it about carbon that allows it to form the molecules of life?
2. When carbon binds to itself what two structures can it create?

**PAGES 46-49**

1. What are “macromolecules”?
2. What are the four major groups of macromolecules?
3. What is the function of carbohydrates?
4. How do many organisms store extra sugar?
5. Draw a picture of what this storage molecule looks like:
6. In animals, this storage molecule is called:
7. What complex carbohydrate provides plants with their strength and rigidity?
8. What are examples of lipids?
9. What are the two functions of lipids?
10. Looking at Figure 2-15, what two molecules bind together to make a lipid?
11. What are the three parts of a nucleotide?
12. What is the function of nucleic acid?
13. Name two kinds of nucleic acids we’ve learned in class:
14. What are the building blocks of proteins?
15. What are three functions of proteins?
16. How many levels of structure do proteins have? \_\_\_\_\_
17. Using the figures on these pages, match each macromolecule with its correct structure.

Lipid \_\_\_

 Protein \_\_\_ A. C.

 Nucleic acid \_\_\_

 Carbohydrate \_\_\_ B. D.

1. Again, looking at the figures, what chemical elements make up these macromolecules?

(HINT: There should be four!)

**PAGES 79**

1. Read the “Think About It” section. Now double check your answer to #20. What chemical elements make up most living organisms again?
2. How does matter move through the biosphere?
3. How does this recycling occur? Don’t forget to name the three processes involved!
4. Does matter get destroyed in these cycles? Explain.

**PAGES 82-83**

1. What element is often used in describing the life on planet Earth? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Describe two ways carbon can be found in living things:
3. Describe how carbon can be found in the earth:
4. Describe two ways carbon can be released into the atmosphere:
5. On the diagram on the next page, draw arrows to show one of each of these processes in the carbon cycle: biological, human, geological and physical/chemical. Color code the arrows using the key in Figure 3-17. Use the blank space to describe each process.

**Biological:**

**Human:**

**Geological:**

**Physical/Chemical:**