

Carbon Chemistry ▪ 8.4 Review and Reinforce**Life With Carbon****Understanding Main Ideas**

Answer the following questions on a separate sheet of paper.

1. What are the four main classes of organic compounds in living things?
2. Why are starch and cellulose considered different compounds even though they are both built from glucose?
3. How does DNA determine the differences among living things?
4. Describe your body's requirements for vitamins and minerals.

Building Vocabulary

Fill in the blank with the word or words that best completes each sentence.

glucose	carbohydrate	amino acids	DNA
cellulose	proteins	cholesterol	lipids
nucleic acid	fatty acids	nucleotide	
complex carbohydrate	starch	RNA	

5. Twenty different _____ make up proteins.
6. Each lipid molecule is composed of three _____ and one alcohol.
7. Different _____ are made when different sequences of amino acids are linked into long chains.
8. Gram for gram, _____ release twice as much energy in your body as do _____.
9. A very large organic compound made up of carbon, oxygen, hydrogen, nitrogen, and phosphorus is called a(n) _____.
10. _____ and _____ are the two types of nucleic acids.
11. The monomer that makes up a nucleic acid is a(n) _____.
12. A polymer made of simple carbohydrates bonded to one another is called a(n) _____.
13. _____ is a waxy substance found in all animal cells.
14. _____ is a simple carbohydrate. Both _____ and _____ are complex carbohydrates.