	ine chemistry of Life	Section 6.1 Atoms Int
In your textbook, red	ad about elements, atoms, and isotopes	s.
Determine if the st	tatement is true. If it is not, rewrit	te the italicized part to make it true.
1. An element is a	substance that can be broken down in	1to simpler substances.
2. On Earth, <i>90</i> el	ements occur naturally.	
3. Only four elements of a human	ents— <i>carbon, hydrogen, oxygen, and nit</i> n	<i>trogen</i> —make up more than 96 percent o
4. Each element is	s abbreviated by a one- or two-letter <i>f</i>	formula.
5. Trace elements,	, such as iron and magnesium, are pre	esent in living things in very large amount
Covetant Band(s)	- Le monstoriet	
6. The properties	of elements are determined by the stra	uctures of their atoms.
Label the parts of t	the stom Use these choices.	
Laber the parts of t	ine atom. Ose these choices.	
energy level	electron neutron	proton nucleus
		e ⁻ 11.
7		10.
		9.
8		
8		
8Answer the followi	ng questions.	
8Answer the followi12. What is the max	ng questions. ximum number of electrons in each of	f the following energy levels: first, second
 8 Answer the followi 12. What is the max 	ng questions. ximum number of electrons in each of	of the following energy levels: first, second
 8 Answer the followi 12. What is the max 	ing questions.	of the following energy levels: first, secon
 8 Answer the followi 12. What is the max 13. Boron has two is 	ing questions. ximum number of electrons in each of sotopes, boron-10 and boron-11. Bor	of the following energy levels: first, secon
 8 Answer the followi 12. What is the max 13. Boron has two is many protons an 	ang questions. ximum number of electrons in each or sotopes, boron-10 and boron-11. Bor nd neutrons does boron-11 have? Exp	of the following energy levels: first, secon ron-10 has five protons and five neutrons plain.
 8 Answer the followi 12. What is the max 13. Boron has two is many protons an many protons and pro	ing questions. ximum number of electrons in each of sotopes, boron-10 and boron-11. Bor nd neutrons does boron-11 have? Exp	of the following energy levels: first, secon- ron-10 has five protons and five neutrons plain.

Date



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Section 6.1 Atoms and Their Interactions, continued

In your textbook, read about compounds and bonding, chemical reactions, and mixtures and solutions.

Write the type of substance described. Use these choices: compound, element.

14. H₂O, a liquid that no longer resembles either hydrogen or oxygen gas

15. A substance that can be broken down in a chemical reaction

16. Carbon, the substance represented by the symbol C

Complete the table by checking the correct column for each description.

Statement	Ionic Bond(s)	Covalent Bond(s)
17. Found in the compound NaCl	nerse an antiques	- Andreas - Andreas
18. Increases the stability of atoms	ic atom. Date these	t lo erang add ladd
19. Results in the formation of a molecule	noutrate	the diamona
20. Is formed when atoms share electrons		

Fill in the blanks with the correct number of molecules to balance the chemical equation. Then answer the questions.

 $C_6H_{12}O_6 + O_2 \rightarrow CO_2 + H_2O$

21. Why must chemical equations always balance?

22. Which number indicates the number of atoms of each element in a molecule of a substance.

23. When is a mixture not a solution?

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24. What is the difference between an acid and a base?

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Name

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Class

Date

Name			Date	Class	<u></u>	
Chapter 6 The Chemistry of Life, continued			Rein	Reinforcement and Study Guide Section 6.3 Life Substances		
In your textbook, re	ad about the rol	e of carbon in organism	<i>s</i> .			
For each of the fol	llowing statem	ents about carbon, wr	ite <u>true</u> or <u>fal</u>	se.		
	1. Carbo	on atoms can bond toge	ther in straight	chains, branched chains,	or rings.	
	2. Large	e molecules containing	carbon atoms :	are called micromolecules	S.	
	3. Polyr	ners are formed by hyd	rolysis.			
	4. Cells	use carbohydrates for e	energy.			
Write each item b	elow under the	e correct heading.				
sucrose	glucose	starch C ₆ H	H ₁₂ O ₆			
cellulose	glycogen	fructose C_{12}	H ₂₂ O ₁₁	a single produce in strong		
Monosaccharide		Dissaccharie	de	Polysaccharid	le	
5.		8.		10.	0	

Complete the table by checking the correct column for each description.

9.

6.

7.

Description	Lipids	Proteins	Nucleic Acids
13. Made up of nucleotides			
14. Most consist of three fatty acids bonded to a glycerol molecule			
15. DNA and RNA			n near Ar
16. Contain peptide bonds			
17. Produce proteins	en pression		
18. Commonly called fats and oils			
19. Made up of amino acids	A Long the second		Saureb & Ja
20. Used for long-term energy storage, insulation, and protective coatings			
21. Contain carbon, hydrogen, oxygen, and nitrogen			

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11.

12.