

True-False Fill-in: If the statement is true, write the word, TRUE. If the statement is false, change the underlined word to make the statement true.

- _____ 1. Atoms are not the basic units of matter.
 _____ 2. A(n) compound is any substance that can not be split into simpler substances by ordinary chemical means.
 _____ 3. A(n) molecule is defined as the smallest part of a chemical element.
 _____ 4. The chart that shows all of the known chemical elements is called The Periodic Table of The Chemicals.
 _____ 5. There are more than 100 known elements.
 _____ 6. Each element is represented by one or two letters called a chemical symbol.
 _____ 7. If an element is represented by one letter, then that letter is sometimes capitalized.
 _____ 8. If an element is represented by two letters, Then the first letter is always capitalized and the second letter is sometimes lower case.
 _____ 9. A molecule is a particle that has two or more atoms bonded together.
 _____ 10. The air we breath has molecules of oxygen atoms bonded together in threes.
 _____ 11. The chemical formula for water is HOH.
 _____ 12. A compound is a substance composed of two or more chemically combined elements.
 _____ 13. A chemist writes the formula for water as follows: H₃O
 _____ 14. The chemical formula for a simple sugar called glucose is C₆H₁₂O₆. This molecule contains 36 atoms in all.
 _____ 15. Numbers called subscripts are used to show how many molecules of a substance are involved in a chemical reaction.

Write the number of atoms for each element making up each of the following compounds:

Chemical Name	Chemical symbol	Atoms
Water	H ₂ O	2-hydrogen, 1-oxygen
Sodium chloride	NaCl	
Calcium carbonate	CaCO ₃	
Sulfuric acid	H ₂ SO ₄	
Hydrogen sulfide	H ₂ S	
Potassium chlorate	KClO ₃	

Write the chemical formulas for the following compounds:

Sodium hydroxide		1-sodium, 1-oxygen, 1-hydrogen
Silicon dioxide		1-silicon, 2-oxygen
Pentane		5-carbon, 12-hydrogen
Copper chloride		1-copper, 2-chlorine