

Self Quiz: Atomic Structure and Equations

Circle the letter of the correct answer.

1. A(n) _____ is a substance made up of one kind of atom.
a. compound b. element c. mixture d. enzyme
2. The smallest particle of an element having the properties of that element is a(n) _____.
a. atom b. compound c. molecule d. enzyme
3. A(n) _____ is matter made of substances that are not chemically bonded together.
a. mixture b. element c. compound d. molecule
4. The correctly written symbol for chlorine is _____.
a. C b. CL c. Ch d. Cl
5. How many atoms of hydrogen are in each molecule of table sugar, $C_{12}H_{22}O_{11}$?
a. 11 b. 12 c. 22 d. 45
6. Which of the following is a compound?
a. iron b. blood c. carbon dioxide d. air
7. A(n) _____ contains two or more atoms bonded together.
a. mixture b. molecule c. atom d. element
8. A substance that contains two or more different kinds of atoms bonded together is _____.
a. an element b. oxygen c. energy d. a compound
9. How many atoms of oxygen are represented in the equation: $C + O_2 \rightarrow CO_2$?
a. 1 b. 2 c. 3 d. 4
10. The smallest part of a compound that still has the properties of that compound is a(n) _____.
a. atom b. cell c. molecule d. element
11. An atom that contains 15 protons and 10 neutrons within its nucleus will have an atomic mass of _____ amu.
a. 5 b. 10 c. 15 d. 25
12. An atom of atomic number 12 and mass number 22 contains how many protons?
a. 10 b. 12 c. 22 d. 34
13. The atom described in problem 12 will have how many electrons?
a. 10 b. 12 c. 22 d. 34
14. The atom described in problem 12 will have how many neutrons?
a. 10 b. 12 c. 22 d. 34
15. Elements combine by losing, sharing, or gaining _____.
a. electrons b. protons c. neutrons d. molecules