



Assessment

Choose the letter that corresponds to the best answer.

1. The groups are basic units of counting, except one. Which one is NOT the basic unit of counting?
a. dozen, box, pairs
b. mole, reams, case
c. mole, ruler, pairs
d. pairs, case, mole
2. Which one correctly described a mole?
a. Mole is a way of counting the individual tiny representative particles of matter.
b. Mole is a basic unit of counting the number of tiny representative particles of matter.
c. Mole is a way of determining the type of representative particles that exist in a given sample of matter.
d. Mole is a unit of counting of any tiny object or things such as bacteria that could be seen only with the aid of a microscope.
3. Which substance is equivalent to 1 mole?
A. 1.024×10^{23} formula units of salt
B. 2.42×10^{13} molecules of glucose
C. 6.02×10^{25} atoms of iron
D. 0.02×10^{23} hydrogen molecules
4. What representative particle is present in a molecular or covalent compound?
a. atoms
b. formula unit
c. ions
d. molecules
5. Which statement correctly described the relationship of mole and molar mass?
a. mole and molar mass are always the same in amount
b. one mole of a substance is always equivalent to its molar mass
c. one mole of a substance always contains the same molar mass
d. one mole of a substance is equivalent to its molar mass and atomic mass.
6. Salt was dissolved in water. In the dissolution process, the components of salt which are sodium and chlorine will be partially broken down. Aside from water molecules, what other representative particles are in the solution?
a. atoms
b. electrons
c. formula unit
d. ions
7. How many molecules are there in 2 moles of H₂O?
A. 2×10^{23}
B. 6.02×10^{23}
C. 1.204×10^{24}
D. 6.02×10^{46}
8. Which represents a mole of a substance?
a. 5 g of NaCl
b. 24 g graphite, C-atom
c. 3.01×10^{23} CH₄ molecules
d. 6.02×10^{23} F atoms
9. Which represents the sum of all the atomic weights of each element in a given compound?
a. formula
b. molar mass
c. mole
d. particles
10. Which one is not a representative particle?
a. atoms
b. ions
c. molecules
d. protons