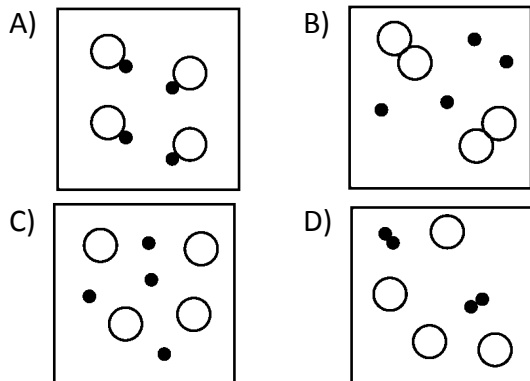


1. Which particle diagram represents one pure substance, only?



2. Which substance can be decomposed by a chemical change?

- A) calcium B) potassium
C) copper D) ammonia

3. Which terms are used to identify pure substances?

- A) an element and a mixture
B) an element and a compound
C) a solution and a mixture
D) a solution and a compound

4. Two substances, A and Z, are to be identified. Substance A can *not* be broken down by a chemical change. Substance Z can be broken down by a chemical change. What can be concluded about these substances?

- A) Both substances are elements.
B) Both substances are compounds.
C) Substance A is an element and substance Z is a compound.
D) Substance A is a compound and substance Z is an element.

5. Tetrachloromethane, CCl_4 , is classified as a

- A) compound because the atoms of the elements are combined in a fixed proportion
B) compound because the atoms of the elements are combined in a proportion that varies
C) mixture because the atoms of the elements are combined in a fixed proportion
D) mixture because the atoms of the elements are combined in a proportion that varies

6. Which substance can *not* be decomposed by a chemical change?

- A) AlCl_3 B) H_2O C) HI D) Cu

7. Which list of formulas represents compounds, only?

- A) CO_2 , H_2O , NH_3 B) H_2 , N_2 , O_2
C) H_2 , Ne , NaCl D) MgO , NaCl , O_2

8. Matter that is composed of two or more different elements chemically combined in a fixed proportion is classified as

- A) a compound B) an isotope
C) a mixture D) a solution