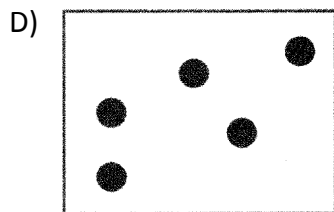
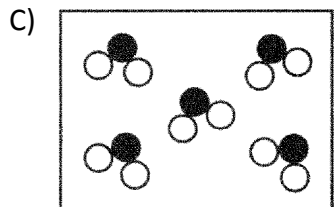
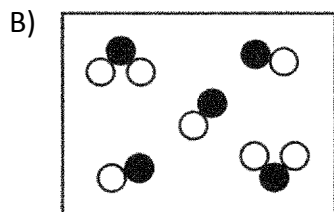
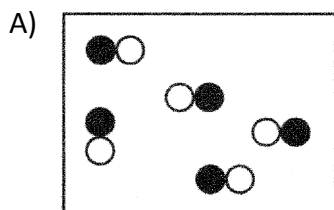
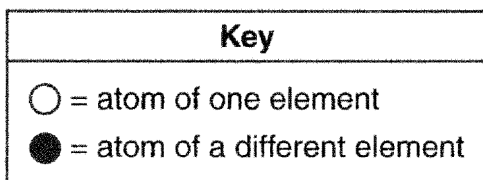


Elements, Compounds, and Mixtures

1. All atoms of a given element must have the same

- A) atomic mass B) atomic weight
C) mass number D) atomic number

2. Which particle diagram represents a sample of matter that can *not* be broken down by chemical means?



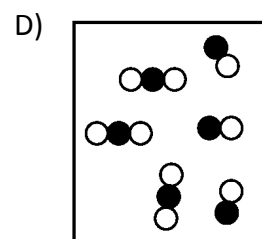
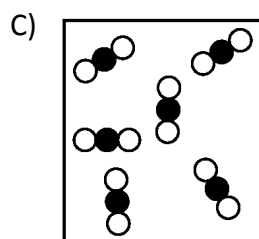
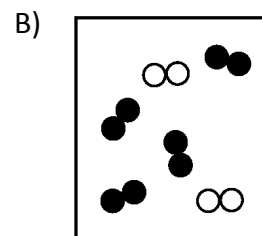
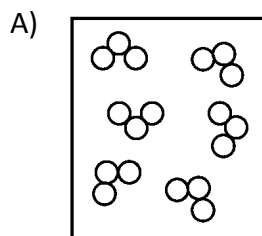
3. Which substance can be broken down by chemical means?

- A) magnesium B) manganese
C) mercury D) methanol

4. Given the simple representations for atoms of two elements:

- = an atom of an element
● = an atom of a different element

Which particle diagram represents molecules of only one compound in the gaseous phase?

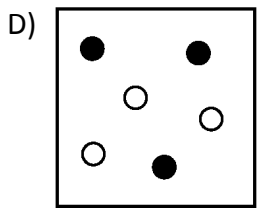
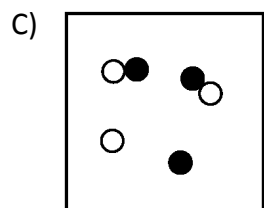
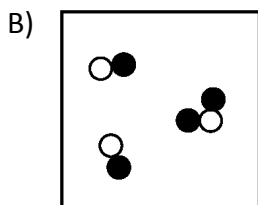
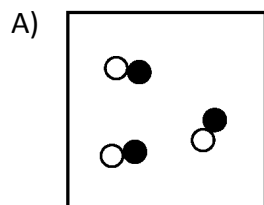


5. Two solid samples each contain sulfur, oxygen, and sodium, only. These samples have the same color, melting point, density, and reaction with an aqueous barium chloride solution. It can be concluded that the two samples are the same

- A) compound B) element
C) mixture D) solution

6. Which particle diagram represents a mixture of element X and element Z, only?

Key
● = atom of X
○ = atom of Z



7. The list below shows four samples: A, B, C, and D.

- (A) HCl(aq)
- (B) NaCl(aq)
- (C) HCl(g)
- (D) NaCl(s)

Which samples are mixtures?

- A) A and B
- B) A and C
- C) C and B
- D) C and D