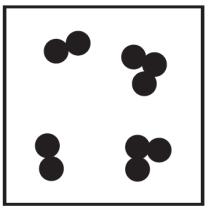
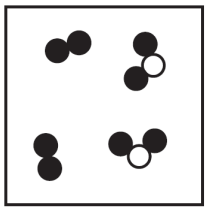
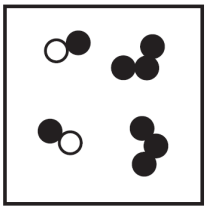
Name: **Particle Diagrams Worksheet**

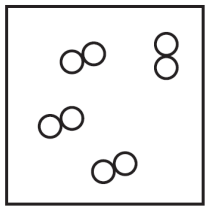
1. Which diagram represents a mixture of two different molecular forms of the same element?

Key
● = atom of element X
○ = atom of element Z

A) 

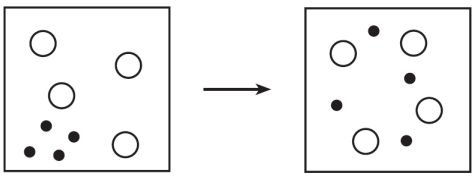
B) 

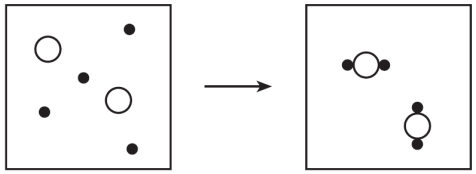
C) 

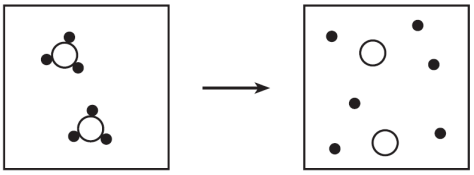
D) 

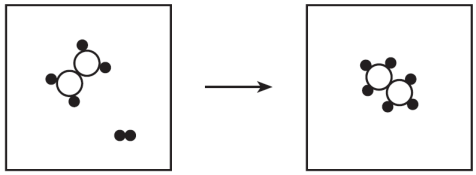
2. Which diagram represents a physical change, only?

Key
• = an atom of an element
○ = an atom of a different element

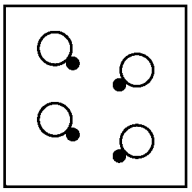
A) 

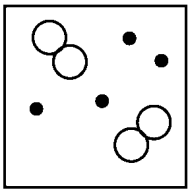
B) 

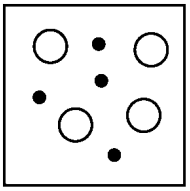
C) 

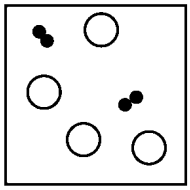
D) 

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

A) 

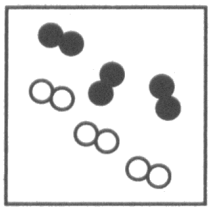
B) 

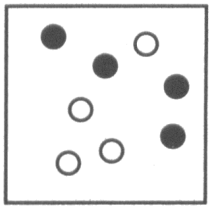
C) 

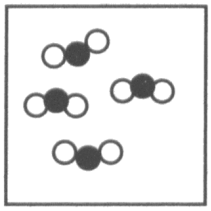
D) 

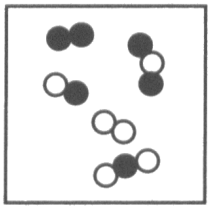
4. Which particle model diagram represents only one compound composed of elements *X* and *Z*?

Key
● = atom of element X
○ = atom of element Z

A) 

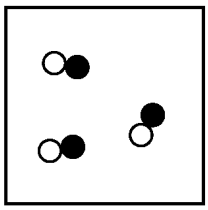
B) 

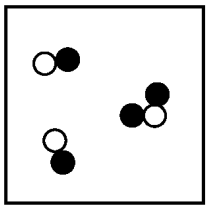
C) 

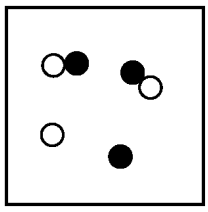
D) 

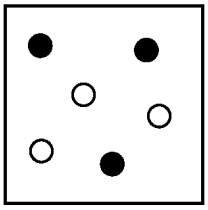
5. Which particle diagram represents a mixture of element *X* and element *Z*, only?

Key
● = atom of X
○ = atom of Z

A) 

B) 

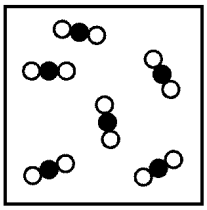
C) 

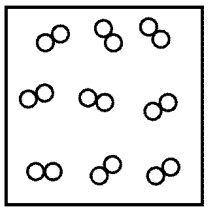
D) 

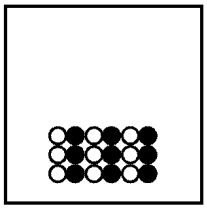
6. Given the key:

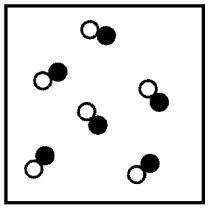
Key
○ = Atom of oxygen
● = Atom of carbon

Which particle diagram represents a sample containing the compound CO(g)?

A) 

B) 

C) 

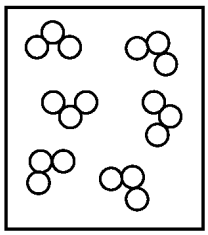
D) 

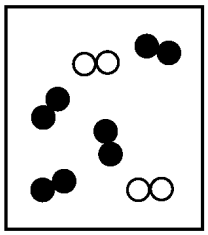
7. Given the simple representations for atoms of two elements:

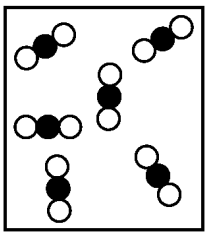
○ = an atom of an element

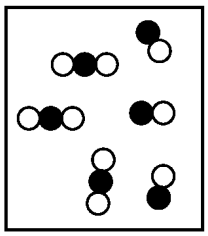
● = an atom of a different element

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

A) 

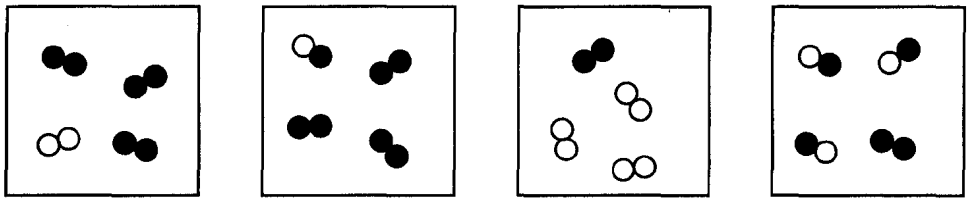
B) 

C) 

D) 

8. Which two particle diagrams represent mixtures of diatomic elements?

Key
○ = atom of one element
● = atom of another element



A B C D

A) *A* and *B* B) *A* and *C* C) *B* and *C* D) *B* and *D*