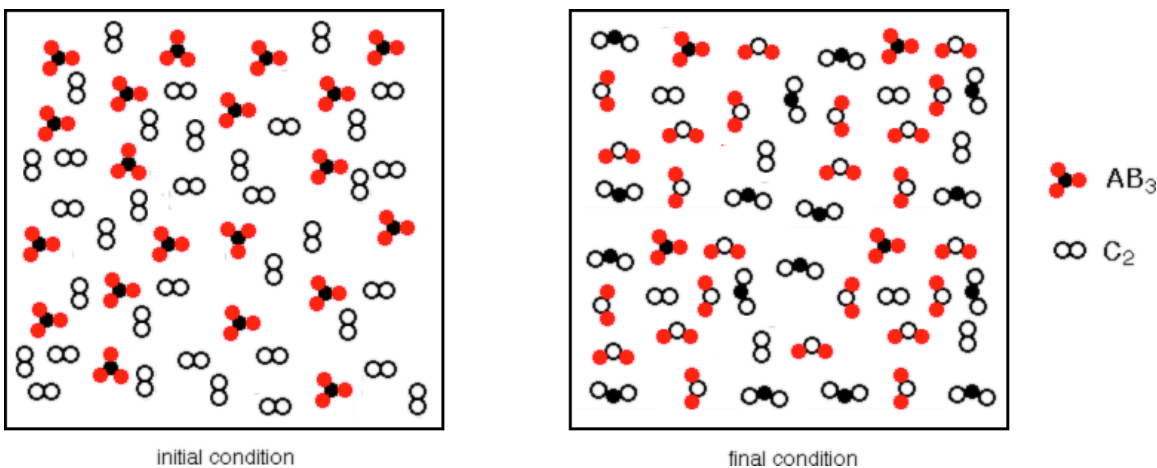
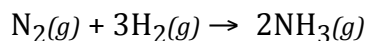


Stoichiometry Problems

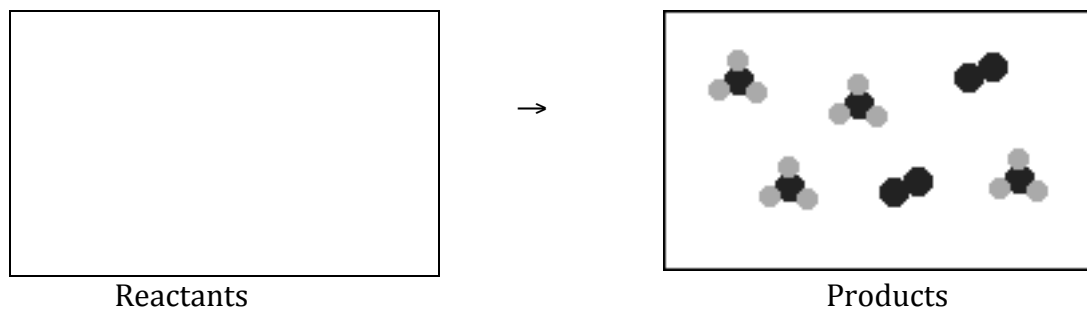
1. Consider the container label 'initial condition' as the reactants before any reaction has occurred, and the container labeled 'final condition' as the same container after the reaction has reached completion. Write a balanced chemical equation that best describes the reaction represented by the containers below?



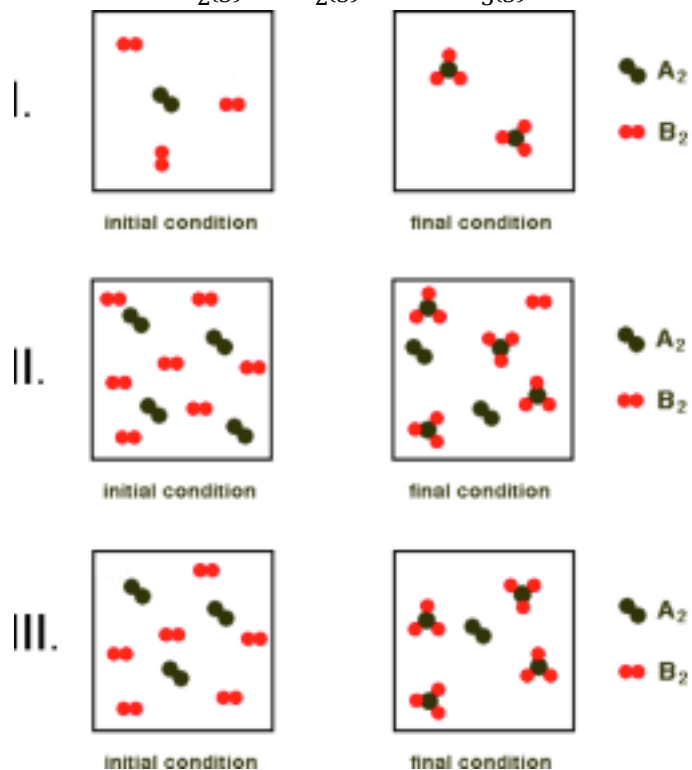
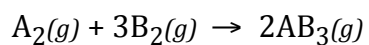
2. In the container below labeled Products are the contents after the reaction described by the chemical equation, (6)



has occurred. In the Reactants container, draw and label the contents before the reaction occurs.

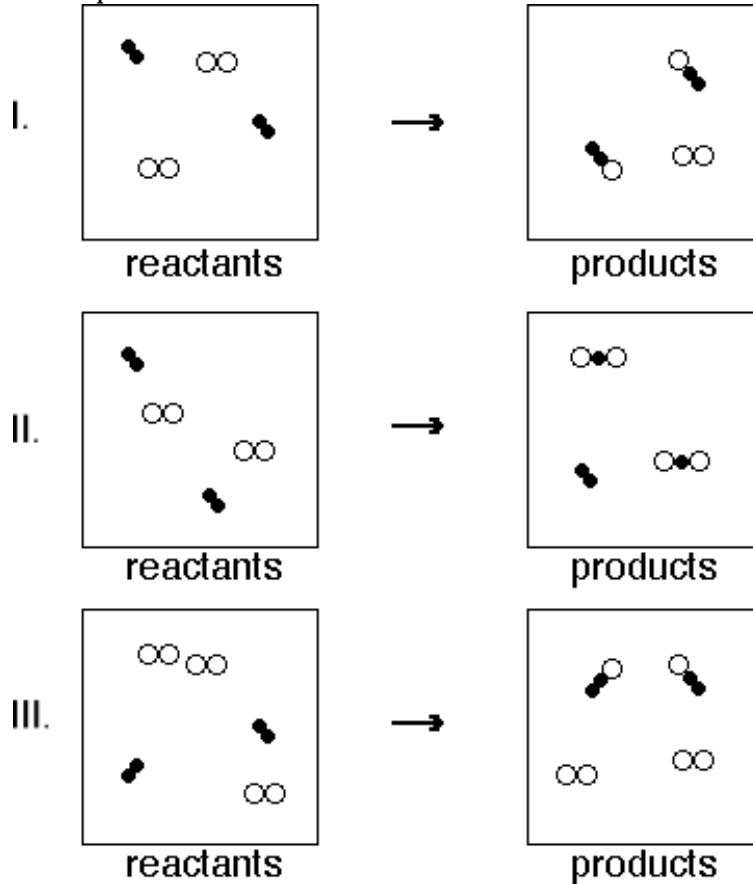


3. Which of the following changes can be described by the balanced chemical equation,



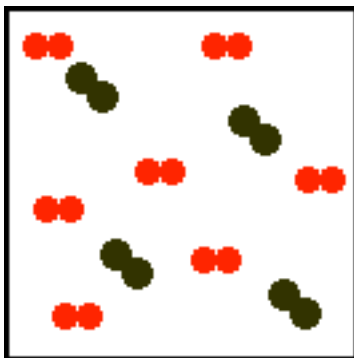
- A) I only
 B) II only
 C) I and III
 D) II and III
 E) I, II and III

4. Which of the following representations can be described using the same balanced chemical equation?

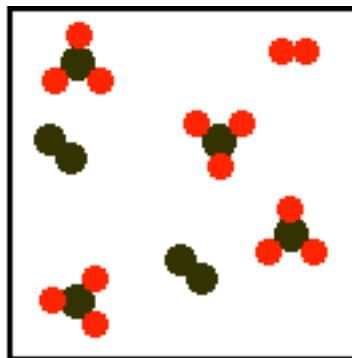


- A) I and II
- B) I and III
- C) II and III
- D) I, II and III
- E) I, II and III are each different

5. Which of the chemical equations best describes the reaction represented by the containers below? Consider the container label 'initial condition' as the reactants before any reaction has occurred, and the container labeled 'final condition' as the same container after the reaction has reached completion.



initial condition



final condition



- A) $4A_2(g) + 7B_2(g) \rightarrow 4AB_3(g)$
 B) $4A_2(g) + 7B_2(g) \rightarrow 4AB_3(g) + 1B_2(g) + 2A_2(g)$
 C) $A_2(g) + 3B_2(g) \rightarrow 2AB_3(g)$
 D) $4A_2(g) + 6B_2(g) \rightarrow 4AB_3(g)$
 E) $A_2(g) + B_2(g) \rightarrow AB_3(g)$