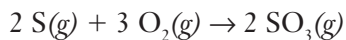


STOICHIOMETRY PART I

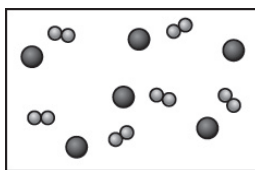
NAME _____

SECTION _____

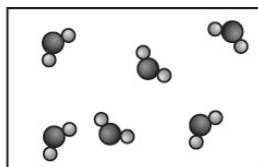
1. The equation for the reaction is:



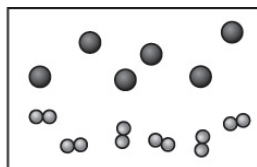
Consider a mixture of sulfur atoms and dioxygen molecules in a closed container below:



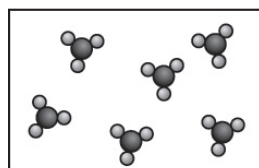
For each of the following explain why the representation is correct or incorrect.



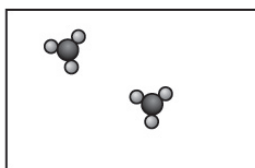
A



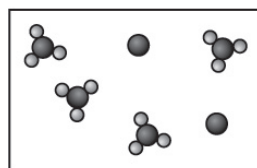
B



C

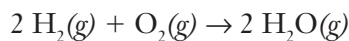


D



E

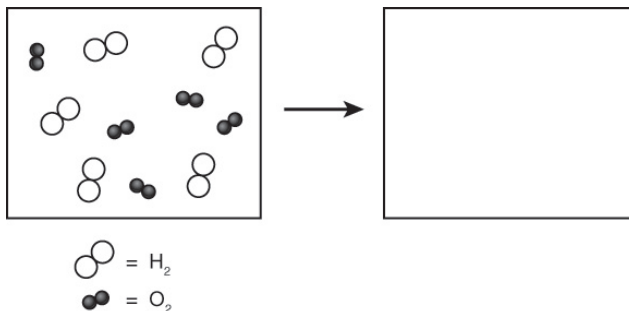
2. The reaction between hydrogen and oxygen to form water is shown below:



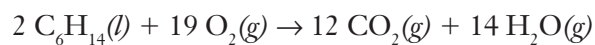
- a. In the container below draw a mixture of the reactants before any reaction has occurred.
- b. In the container below draw the mixture after the reaction has occurred as described by the equation above.



- c. In the container below left is a mixture of H_2 and O_2 molecules. In the container below right, draw what the contents of the container would be after the reaction takes place.



3. In the combustion reaction



Calculate the number of moles of CO_2 formed when

- 2.0 moles of C_6H_{14} react with excess O_2 .
- 6.0 moles of O_2 react with excess C_6H_{14} .
- 38.0 g of H_2O is formed.