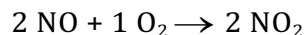


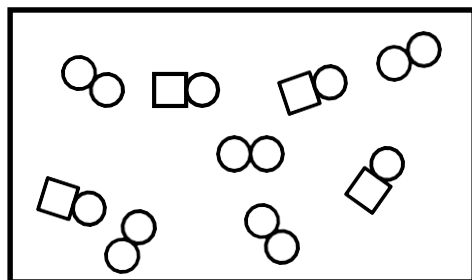
Topic 8: Particulate Diagrams

1. Consider the synthesis of nitrogen dioxide

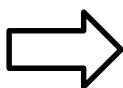


- a. In the diagram below, nitrogen atoms are represented with squares and oxygen atoms are represented with circles. Using the conservation of matter, draw what you would expect to find in the reaction vessel once the reaction is complete.

Before Reaction:



After Reaction



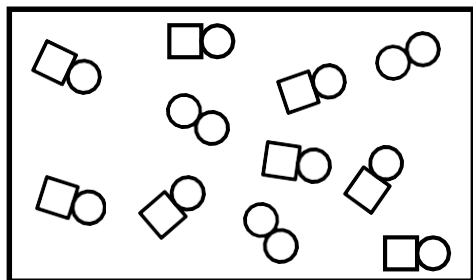
Limiting Reactant:

Excess Reactant:

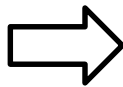
Explanation

- b. Consider the same reaction, with different starting quantities. Draw the contents of the reaction vessel after the reaction is complete.

Before Reaction:



After Reaction



Limiting Reactant:

Excess Reactant:

Explanation