1) **What is the general form of a chemical equation?**
   a) Reactants + Products → Energy
   b) Reactants → Products + Energy
   c) Reactants + Products → Reactants
   d) Reactants + Products → Products

   Answer: b) Reactants → Products + Energy
2) **Which of the following is a balanced chemical equation?**
   a) $H_2 + O_2 \rightarrow H_2O$
   b) $2H_2 + O_2 \rightarrow 2H_2O$
   c) $H_2 + O_2 \rightarrow H_2O_2$
   d) $2H_2 + O_2 \rightarrow H_2O + O_2$

   Answer: b) $2H_2 + O_2 \rightarrow 2H_2O$
3) **In a chemical reaction, which of the following is always conserved?**
   a) Mass
   b) Volume
   c) Temperature
   d) Color

   Answer: d) color
4) **What type of reaction is represented by the equation: $Fe + O_2 \rightarrow Fe_2O_3$?**
   a) Decomposition Reaction
   b) Combination Reaction
   c) Displacement Reaction
   d) Double Displacement Reaction

   Answer: b) Combination Reaction
5) **Which of the following statements is true about a decomposition reaction?**
   a) One reactant produces two or more products.
   b) Two or more reactants combine to form a single product.
   c) An element displaces another element in a compound.
   d) Two compounds react to form two new compounds.

   Answer: a) One reactant produces two or more products.