Answers to Practice Problems 39, 40 in page 294

39. a.
$$2C_3H_6 + 9O_2 \longrightarrow 6CO_2 + 6H_2O$$

b.
$$C_5H_{12} + 8O_2 \longrightarrow 5CO_2 + 6H_2O$$

c.
$$2CH_3OH + 3O_2 \rightarrow 2CO_2 + 4H_2O$$

d.
$$C_{12}H_{22}O_{11} + 12O_2 \rightarrow 12CO_2 + 11H_2O$$

40. a. combustion;
$$C_3H_8 + 5O_2 \rightarrow 3CO_2 + 4H_2O$$

- b. decomposition; CuCl₂ → Cu + Cl₂
- **c.** synthesis; $2Mg + O_2 \rightarrow 2MgO$
- d. decomposition; Na₂CO₃ → Na₂O + CO₂
- e. decomposition; Ba(OH)₂ → BaO + H₂O
- f. combustion; $C_2H_5OH + 3O_2 \rightarrow 2CO_2 + 3H_2O$