Skill Practice 28

Reactions Practice

Name: _____

Date: _____

Hour: _____

I. Single Replacement Reactions

(Remember, some reactions will NOT proceed. If there is no reaction, write "NR" to the right of the arrow.)

1. Write the reaction for each of the following reactions:
   a) Sodium sulfate reacts with magnesium to produce magnesium sulfate and sodium

   b) Copper(I) carbonate reacts with aluminum to form copper metal and aluminum carbonate.

2. Complete the following reactions:
   a) $Ca(NO_3)_2 + Al \rightarrow$

   b) $Zn + K_3PO_4 \rightarrow$

II. Double Replacement Reactions

3. Write the reaction for each of the following reactions:
   a) Iron(II) phosphate reacts with sodium chloride to produce iron(II) chloride and sodium phosphate.

   b) Calcium carbonate reacts with lithium hydroxide to produce calcium hydroxide and lithium carbonate.

4. Complete the following reactions:
   a) $Mg(NO_3)_2 + Al(C_2H_3O_2)_3 \rightarrow$

   b) $Ba(OH)_2 + Na_3PO_4 \rightarrow$

III. Combustion Reactions

You can try the following formula to balance: $(C_xH_y + (x + y/4)O_2 \rightarrow xCO_2 + yH_2O)$

5. Write the combustion reactions for the following compounds.
   a) C_2H_4

   b) C_8H_{16}

Skill Practice 29

Balancing Practice

Name: _____

Date: _____

Hour: _____

Directions: Complete the following equations. (Some reactions will already be complete.) After they are complete, balance them. Indicate in the blank to the left of each question whether the reaction is a single replacement (SR), double replacement (DR), synthesis (S), decomposition (D), or combustion (C).

_____ 1. $C_4H_8 + O_2 \rightarrow$

_____ 2. $Al_2(CO_3)_3 +$ _____ $\rightarrow Al(NO_3)_3 + Na_2CO_3$

_____ 3. $Li +$ _____ $\rightarrow LiBr$

_____ 4. $Na_2CO_3 \rightarrow Na + C + O_2$

_____ 5. $Mg + CuCl \rightarrow$

_____ 6. $CaCl_2 + Al(NO_3)_3 \rightarrow$

_____ 7. $Ca_3(PO_4)_2 + Al \rightarrow$

_____ 8. $C_3H_8 + O_2 \rightarrow$

_____ 9. $Ca + O_2 \rightarrow CaO$

_____ 10. $N_2O_5 \rightarrow N_2 + O_2$