

Reaction Task Cards

PROCEDURE

For each task card, the following tasks must be fulfilled:

1. List (on the corresponding data sheet) the number for each task card that is completed.
2. Write the full reaction from each task card using the correct formulas for both reactants and products.
3. Balance each reaction.
4. Classify each reaction using the following categories:
 - a. Synthesis
 - b. Decomposition
 - c. Single Displacement
 - d. Double Displacement
 - e. Combustion
 - f. Neutralization

Reaction Task Cards Answer Key

Task Card	Balanced Reaction	Classification
1	$C_6H_{14} + 19/2 O_2 \rightarrow 6 CO_2 + 7 H_2O$	Combustion
2	$4Ag + O_2 \rightarrow 2 Ag_2O$	Synthesis
3	$3 Cl_2 + 2 FeBr_3 \rightarrow 3 Br_2 + 2 FeCl_3$	Single Replacement
4	$Cr(ClO_3)_3 \rightarrow CrCl_3 + 9/2 O_2$	Decomposition
5	$H_2S \rightarrow H_2 + S$	Decomposition
6	$NaOH + HC_2H_3O_2 \rightarrow NaC_2H_3O_2 + H_2O$	Neutralization
7	$(NH_4)_2S + Co(NO_3)_2 \rightarrow CoS + 2 NH_4NO_3$	Double Replacement
8	$Mg + Cl_2 \rightarrow MgCl_2$	Synthesis
9	$C_2H_2 + 5/2 O_2 \rightarrow 2 CO_2 + H_2O$	Combustion
10	$NH_4OH + HNO_3 \rightarrow NH_4NO_3 + H_2O$	Neutralization
11	$2 Li + 2 H_2O \rightarrow H_2 + 2 LiOH$	Single Replacement
12	$Na_3PO_4 + CrCl_3 \rightarrow CrPO_4 + 3 NaCl$	Double Replacement
13	$BaF_2 \rightarrow Ba + F_2$	Decomposition
14	$2 Li + S \rightarrow Li_2S$	Synthesis
15	$Ca + MgCl_2 \rightarrow Mg + CaCl_2$	Single Replacement
16	$KOH + HCl \rightarrow KCl + H_2O$	Neutralization
17	$C_4H_{10} + 13/2 O_2 \rightarrow 4 CO_2 + 5 H_2O$	Combustion
18	$HCl + AgNO_3 \rightarrow AgCl + HNO_3$	Double Replacement
19	$C_3H_6 + 9/2 O_2 \rightarrow 3 CO_2 + 3 H_2O$	Combustion
20	$2 NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2 H_2O$	Neutralization
21	$CuSO_4 + Ba(OH)_2 \rightarrow Cu(OH)_2 + BaSO_4$	Double Replacement
22	$MgCO_3 \rightarrow MgO + CO_2$	Decomposition
23	$Al + 3 AgCl \rightarrow 3 Ag + AlCl_3$	Single Replacement
24	$3 Ca + N_2 \rightarrow Ca_3N_2$	Synthesis
25	$H_2SO_3 \rightarrow SO_2 + H_2O$	Decomposition
26	$C_3H_{12} + 8 O_2 \rightarrow 5 CO_2 + 6 H_2O$	Combustion
27	$Ba(OH)_2 + 2 HNO_3 \rightarrow Ba(NO_3)_2 + 2 H_2O$	Neutralization
28	$H_2S + NiCl_2 \rightarrow NiS + 2 HCl$	Double Replacement
29	$Cl_2 + 2 NaI \rightarrow I_2 + 2 NaCl$	Single Replacement
30	$2 Al + N_2 \rightarrow 2 AlN$	Synthesis