

Chemical Formulas

Ammonium bromide	$\text{NH}_4\text{Br}$	Magnesium sulfide	$\text{MgS}$
Calcium sulfate	$\text{CaSO}_4$	Zinc carbonate	$\text{ZnCO}_3$
Barium bicarbonate	$\text{Ba}(\text{HCO}_3)_2$	Iron (II) bisulfate	$\text{Fe}(\text{HSO}_4)_2$
Cobalt (II) nitrate	$\text{Co}(\text{NO}_3)_2$	Magnesium phosphate	$\text{Mg}_3(\text{PO}_4)_2$
Strontium fluoride	$\text{SrF}_2$	Ammonium chloride	$\text{NH}_4\text{Cl}$
Lithium oxide	$\text{Li}_2\text{O}$	Calcium sulfide	$\text{CaS}$
Zinc sulfate	$\text{ZnSO}_4$	Barium carbonate	$\text{BaCO}_3$
Iron (II) bicarbonate	$\text{Fe}(\text{HCO}_3)_2$	Cobalt (II) bisulfate	$\text{Co}(\text{HSO}_4)_2$
Mercury (II) nitrate	$\text{Hg}(\text{NO}_3)_2$	Manganese dihydrogenphosphate	$\text{Mn}(\text{H}_2\text{PO}_4)_2$
Aluminium phosphate	$\text{AlPO}_4$	Ammonium fluoride	$\text{NH}_4\text{F}$
Magnesium iodide	$\text{MgI}_2$	Copper oxide	$\text{CuO}$
Zinc sulfide	$\text{ZnS}$	Barium sulfate	$\text{BaSO}_4$
Iron (II) carbonate	$\text{FeCO}_3$	Cobalt (II) Hydrogencarbonate	$\text{Co}(\text{HCO}_3)_2$
Mercury (II) bisulfate	$\text{Hg}(\text{HSO}_4)_2$	Magnesium fluoride	$\text{MgF}_2$
Calcium iodide	$\text{CaI}_2$	Zinc oxide	$\text{ZnO}$
Barium sulfide	$\text{BaS}$	Iron (II) sulfate	$\text{FeSO}_4$
Magnesium chloride	$\text{MgCl}_2$	Cobalt (III) carbonate	$\text{Co}_2(\text{CO}_3)_3$
Manganese bisulfate	$\text{Mn}(\text{HSO}_4)_2$	Magnesium bromide	$\text{MgBr}_2$
Aluminium hydroxide	$\text{Al}(\text{OH})_3$	Iron (III) phosphate	$\text{FePO}_4$
Manganese nitrate	$\text{Mn}(\text{NO}_3)_2$	Calcium bromide	$\text{CaBr}_2$
Zinc iodide	$\text{ZnI}_2$	Barium oxide	$\text{BaO}$

Sodium fluoride	$\text{NaF}$	Potassium chloride	$\text{KCl}$
Sliver bromide	$\text{AgBr}$	Ammonium iodide	$\text{NH}_4\text{I}$
Mercury (I) oxide	$\text{Hg}_2\text{O}$	Hydrogen sulfide	$\text{H}_2\text{S}$
Rubidium sulfate	$\text{Rb}_2\text{SO}_4$	Calcium carbonate	$\text{CaCO}_3$
Zinc bicarbonate	$\text{Zn}(\text{HCO}_3)_2$	Barium hydrogensulfate	$\text{Ba}(\text{HSO}_4)_2$
Lithium nitrate	$\text{LiNO}_3$	Cobalt (II) hydroxide	$\text{Co}(\text{OH})_2$
Mercury (II) phosphate	$\text{Hg}_3(\text{PO}_4)_2$	Sodium chloride	$\text{NaCl}$
Potassium bromide	$\text{KBr}$	Caesium iodide	$\text{CsI}$
Mercury (I) sulfide	$\text{Hg}_2\text{S}$	Sulfuric acid	$\text{H}_2\text{SO}_4$
Magnesium carbonate	$\text{MgCO}_3$	Calcium bicarbonate	$\text{Ca}(\text{HCO}_3)_2$
Zinc bisulfate	$\text{Zn}(\text{HSO}_4)_2$	Barium nitrate	$\text{Ba}(\text{NO}_3)_2$
Rubidium phosphate	$\text{Rb}_3\text{PO}_4$	Iron (II) hydroxide	$\text{Fe}(\text{OH})_2$
Sodium bromide	$\text{NaBr}$	Potassium iodide	$\text{KI}$
Silver oxide	$\text{Ag}_2\text{O}$	Ammonium sulfide	$(\text{NH}_4)_2\text{S}$
Mercury (I) sulfate	$\text{Hg}_2\text{SO}_4$	Magnesium bicarbonate	$\text{Mg}(\text{HCO}_3)_2$
Calcium bisulfate	$\text{Ca}(\text{HSO}_4)_2$	Zinc nitrate	$\text{Zn}(\text{NO}_3)_2$
Barium hydroxide	$\text{Ba}(\text{OH})_2$	Iron (II) phosphate	$\text{Fe}_3(\text{PO}_4)_2$
Sodium iodide	$\text{NaI}$	Potassium oxide	$\text{K}_2\text{O}$
Nickel sulfide	$\text{NiS}$	Ammonium sulfate	$(\text{NH}_4)_2\text{SO}_4$
Mercury (I) carbonate	$\text{Hg}_2\text{CO}_3$	Magnesium bisulfate	$\text{Mg}(\text{HSO}_4)_2$
Calcium nitrate	$\text{Ca}(\text{NO}_3)_2$	Zinc hydroxide	$\text{Zn}(\text{OH})_2$

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Iron (III) bicarbonate	$\text{Fe}(\text{HCO}_3)_3$	Iron (II) fluoride	$\text{FeF}_2$
Cobalt (II) chloride	$\text{CoCl}_2$	Manganese oxide	$\text{MnO}$
Aluminium sulfide	$\text{Al}_2\text{S}_3$	Iron(III) sulfate	$\text{Fe}_2(\text{SO}_4)_3$
Chromium (III) carbonate	$\text{Cr}_2(\text{CO}_3)_3$	Cobalt (II) fluoride	$\text{CoF}_2$
Manganese bromide	$\text{MnBr}_2$	Aluminium oxide	$\text{Al}_2\text{O}_3$
Iron (III) sulfide	$\text{Fe}_2\text{S}_3$	Nickel sulfate	$\text{NiSO}_4$
Manganese oxalate	$\text{MnC}_2\text{O}_4$	Aluminium iodide	$\text{AlI}_3$
Iron (III) oxide	$\text{Fe}_2\text{O}_3$	Chromium (III) sulfite	$\text{Cr}_2(\text{SO}_3)_3$
Manganese fluoride	$\text{MnF}_2$	Aluminium bromide	$\text{AlBr}_3$
Iron (III) iodide	$\text{FeI}_3$	Chromium (III) sulfide	$\text{Cr}_2\text{S}_3$
Aluminium chloride	$\text{AlCl}_3$	Lead bromide	$\text{PbBr}_2$
Chromium (III) iodide	$\text{CrI}_3$	Water	$\text{H}_2\text{O}$
Carbon monoxide	$\text{CO}$	Carbon dioxide	$\text{CO}_2$
Sulfur dioxide	$\text{SO}_2$	Nitrogen dioxide	$\text{NO}_2$
Hydrochloric acid	$\text{HCl}$	Sulfuric acid	$\text{H}_2\text{SO}_4$
Hydrogen bromide	$\text{HBr}$	Hydrogen iodide	$\text{HI}$
Hydrogen fluoride	$\text{HF}$	Nitric acid	$\text{HNO}_3$
Sodium hydroxide	$\text{NaOH}$	Ammonia	$\text{NH}_3$
Sodium cyanide	$\text{NaCN}$	Calcium ethanoate	$\text{Ca}(\text{CH}_3\text{COO})_2$
Acetic acid/ Ethanoic acid	$\text{CH}_3\text{COOH}$	Ammonium hydroxide	$\text{NH}_4\text{OH}$
Hydrogen gas	$\text{H}_2$	Oxygen gas	$\text{O}_2$

Iron (II) sulfide	$\text{FeS}$	Cobalt (II) sulfate	$\text{CoSO}_4$
Manganese bicarbonate	$\text{Mn}(\text{HCO}_3)_2$	Rubidium bisulfate	$\text{RbHSO}_4$
Iron (III) nitrate	$\text{Fe}(\text{NO}_3)_3$	Chromium (III) hydroxide	$\text{Cr(OH)}_3$
Copper (II) fluoride	$\text{CuF}_2$	Zinc permanganate	$\text{Zn}(\text{MnO}_4)_2$
Barium iodide	$\text{BaI}_2$	Aluminum nitrate	$\text{Al}(\text{NO}_3)_3$
Iron (III) hydroxide	$\text{Fe(OH)}_3$	Chromium (III) phosphate	$\text{CrPO}_4$
Calcium chloride	$\text{CaCl}_2$	Iron (II) oxide	$\text{FeO}$
Cobalt (II) sulfide	$\text{CoS}$	Manganese carbonate	$\text{MnCO}_3$
Aluminium bicarbonate	$\text{Al}(\text{HCO}_3)_3$	Iron (III) chromate	$\text{Fe}_2(\text{CrO}_4)_3$
Cobalt (III) sulfite	$\text{Co}_2(\text{SO}_3)_3$	Manganese oxide	$\text{MnO}$
Barium bromide	$\text{BaBr}_2$	Iron (II) iodide	$\text{FeI}_2$
Cobalt (II) oxide	$\text{CoO}$	Manganese sulfate	$\text{MnSO}_4$
Iron (III) ethanoate	$\text{Fe}(\text{CH}_3\text{COO})_3$	Chromium (III) chloride	$\text{CrCl}_3$
Iron (II) bromide	$\text{FeBr}_2$	Strontium iodide	$\text{SrI}_2$
Manganese oxide	$\text{MnO}$	Lead chloride	$\text{PbCl}_2$
Manganese sulfide	$\text{MnS}$	Aluminium sulfate	$\text{Al}_2(\text{SO}_4)_3$
Iron (III) carbonate	$\text{Fe}_2(\text{CO}_3)_3$	Barium chloride	$\text{BaCl}_2$
Aluminium carbonate	$\text{Al}_2(\text{CO}_3)_3$	Barium nitrite	$\text{Ba(NO}_2)_2$
Chromium (III) dichromate	$\text{Cr}_2(\text{Cr}_2\text{O}_7)_3$	Iron (II) chloride	$\text{FeCl}_2$
Caesium bromide	$\text{CsBr}$	Aluminium fluoride	$\text{AlF}_3$
Iron (III) chloride	$\text{FeCl}_3$	Chromium (III) bromide	$\text{CrBr}_3$

Chemical Formulas

Barium nitride	$\text{Ba}_3\text{N}_2$	Caesium oxide	$\text{Cs}_2\text{O}$
Potassium sulfide	$\text{K}_2\text{S}$	Silver sulfate	$\text{Ag}_2\text{SO}_4$
Strontium carbonate	$\text{SrCO}_3$	Manganese nitrate	$\text{Mn}(\text{NO}_3)_2$
Calcium hydroxide	$\text{Ca}(\text{OH})_2$	Zinc phosphate	$\text{Zn}_3(\text{PO}_4)_2$
Sodium sulfide	$\text{Na}_2\text{S}$	Potassium hydrogenphosphate	$\text{K}_2\text{HPO}_4$
Silver carbonate	$\text{Ag}_2\text{CO}_3$	Ammonium bicarbonate	$\text{NH}_4\text{HCO}_3$
Nitric acid	$\text{HNO}_3$	Magnesium hydroxide	$\text{Mg}(\text{OH})_2$
Calcium phosphate	$\text{Ca}_3(\text{PO}_4)_2$	Sodium sulfate	$\text{Na}_2\text{SO}_4$
Potassium carbonate	$\text{K}_2\text{CO}_3$	Silver dihydrogenphosphate	$\text{Ag H}_2\text{PO}_4$
Ammonium oxalate	$(\text{NH}_4)_2\text{C}_2\text{O}_4$	Magnesium phosphate	$\text{Mg}_3(\text{PO}_4)_2$
Sodium carbonate	$\text{Na}_2\text{CO}_3$	Potassium sulfite	$\text{K}_2\text{SO}_3$
Silver bisulfate	$\text{AgHSO}_4$	Ammonium sulfide	$(\text{NH}_4)_2\text{S}$
Phosphoric acid	$\text{H}_3\text{PO}_4$	Sodium bicarbonate	$\text{NaHCO}_3$
Silver acetate	$\text{AgCH}_3\text{COO}$	Silver nitrate	$\text{AgNO}_3$
Ammonium hydroxide	$\text{NH}_4\text{OH}$	Mercury (I) phosphate	$\text{Hg}_3\text{PO}_4$
Sodium bisulfate	$\text{NaHSO}_4$	Potassium nitrate	$\text{KNO}_3$
Ammonium phosphate	$(\text{NH}_4)_3\text{PO}_4$	Sodium nitrate	$\text{NaNO}_3$
Potassium hydroxide	$\text{KOH}$	Silver nitrite	$\text{AgNO}_2$
Rubidium hydroxide	$\text{RbOH}$	Potassium phosphate	$\text{K}_3\text{PO}_4$
Sodium phosphate	$\text{Na}_3\text{PO}_4$	Chromium (III) fluoride	$\text{CrF}_3$
Potassium fluoride	$\text{KF}$	Silver chloride	$\text{AgCl}$

Write and balance the following equations: (on a new sheet)

- Potassium bicarbonate + nitric acid → potassium nitrate + water + carbon dioxide  
 $\text{KHCO}_3 + \text{HNO}_3 \rightarrow \text{KNO}_3 + \text{H}_2\text{O} + \text{CO}_2$
- Aluminum bicarbonate → aluminium oxide + water + carbon dioxide  
 $2\text{Al}(\text{HCO}_3)_3 \rightarrow \text{Al}_2\text{O}_3 + 3\text{H}_2\text{O} + 6\text{CO}_2$
- Iron (III) carbonate + hydrochloric acid → iron (III) chloride + water + carbon dioxide  
 $\text{Fe}_2(\text{CO}_3)_3 + 6\text{HCl} \rightarrow 2\text{FeCl}_3 + 3\text{H}_2\text{O} + 3\text{CO}_2$
- Copper (II) sulfate + iron → iron(II) sulfate + copper  
 $\text{CuSO}_4 + \text{Fe} \rightarrow \text{FeSO}_4 + \text{Cu}$
- Ammonium hydroxide + sulfuric acid → ammonium sulfate + water  
 $2\text{NH}_4\text{OH} + \text{H}_2\text{SO}_4 \rightarrow (\text{NH}_4)_2\text{SO}_4 + 2\text{H}_2\text{O}$
- Chromium (III) hydroxide + sulfuric acid → chromium (III) sulfate + water  
 $2\text{Cr}(\text{OH})_3 + 3\text{H}_2\text{SO}_4 \rightarrow \text{Cr}_2(\text{SO}_4)_3 + 6\text{H}_2\text{O}$
- Iron (III) oxide + carbon → iron + carbon dioxide  
 $2\text{Fe}_2\text{O}_3 + 3\text{C} \rightarrow 4\text{Fe} + 3\text{CO}_2$
- Ammonium bicarbonate → ammonium carbonate + water + carbon dioxide  
 $2\text{NH}_4\text{HCO}_3 \rightarrow (\text{NH}_4)_2\text{CO}_3 + \text{H}_2\text{O} + \text{CO}_2$
- Potassium + water → potassium hydroxide + hydrogen gas  
 $2\text{K} + 2\text{H}_2\text{O} \rightarrow 2\text{KOH} + \text{H}_2$
- Sodium hydroxide + sulfuric acid → sodium sulfate + water  
 $2\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
- Magnesium + oxygen gas → magnesium oxide  
 $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$
- Sodium + water → sodium hydroxide + hydrogen gas  
 $2\text{Na} + 2\text{H}_2\text{O} \rightarrow 2\text{NaOH} + \text{H}_2$
- Aluminium carbonate + hydrochloric acid → aluminium chloride + water + CO<sub>2</sub>  
 $\text{Al}_2(\text{CO}_3)_3 + 6\text{HCl} \rightarrow 2\text{AlCl}_3 + 3\text{H}_2\text{O} + 3\text{CO}_2$
- Zinc oxide + phosphoric acid → zinc phosphate + water  
 $3\text{ZnO} + 2\text{H}_3\text{PO}_4 \rightarrow \text{Zn}_3(\text{PO}_4)_2 + 3\text{H}_2\text{O}$
- Ammonium carbonate + nitric acid → ammonium nitrate + carbon dioxide + water  
 $(\text{NH}_4)_2\text{CO}_3 + 2\text{HNO}_3 \rightarrow 2\text{NH}_4\text{NO}_3 + \text{CO}_2 + \text{H}_2\text{O}$

Chemical Formulas

Balance the following equations

- 1  $\text{NaOH} + \text{H}_3\text{PO}_4 \rightarrow \text{Na}_3\text{PO}_4 + \text{H}_2\text{O}$
- 2  $\text{Mg(OH)}_2 + \text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2\text{O}$
- 3  $\text{CaCO}_3 + \text{H}_3\text{PO}_4 \rightarrow \text{Ca}_3(\text{PO}_4)_2 + \text{H}_2\text{O} + \text{CO}_2$
- 4  $\text{K}_2\text{CO}_3 + \text{HCl} \rightarrow \text{KCl} + \text{H}_2\text{O} + \text{CO}_2$
- 5  $\text{Mg(OH)}_2 + \text{H}_3\text{PO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{H}_2\text{O}$
- 6  $\text{Ca} + \text{O}_2 \rightarrow \text{CaO}$
- 7  $\text{Al}_2\text{O}_3 + \text{Fe} \rightarrow \text{Fe}_2\text{O}_3 + \text{Al}$
- 8  $\text{K} + \text{H}_2\text{O} \rightarrow \text{KOH} + \text{H}_2$
- 9  $\text{ZnO} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2\text{O}$
- 10  $\text{Al} + \text{O}_2 \rightarrow \text{Al}_2\text{O}_3$
- 11  $\text{Ca} + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2 + \text{H}_2$
- 12  $\text{NiS} + \text{O}_2 \rightarrow \text{NiO} + \text{SO}_2$
- 13  $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}_2$
- 14  $\text{Na}_2\text{O} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$
- 15  $\text{Al}_2(\text{CO}_3)_3 \rightarrow \text{Al}_2\text{O}_3 + \text{CO}_2$
- 16  $\text{Cr}_2(\text{CO}_3)_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Cr}_2(\text{SO}_4)_3 + \text{H}_2\text{O} + \text{CO}_2$
- 17  $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$
- 18  $\text{Na}_2\text{O}_2 + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{O}_2$
- 19  $\text{Al}(\text{OH})_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2\text{O}$
- 20  $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$

- 1  $\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$
- 2  $\text{KOH} + \text{H}_3\text{PO}_4 \rightarrow \text{K}_3\text{PO}_4 + \text{H}_2\text{O}$
- 3  $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$
- 4  $\text{Na}_2\text{CO}_3 + \text{HCl} \rightarrow \text{NaCl} + \text{CO}_2 + \text{H}_2\text{O}$
- 5  $\text{Fe}_2\text{O}_3 + \text{C} \rightarrow \text{Fe} + \text{CO}_2$
- 6  $\text{NH}_4\text{OH} + \text{H}_2\text{SO}_4 \rightarrow (\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$
- 7  $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$
- 8  $\text{NaHCO}_3 \rightarrow \text{Na}_2\text{CO}_3 + \text{CO}_2 + \text{H}_2\text{O}$
- 9  $\text{Pb}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{PbI}_2 + \text{KNO}_3$
- 10  $\text{Ca}(\text{OH})_2 + \text{HNO}_3 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{H}_2\text{O}$
- 11  $\text{Na} + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
- 12  $\text{NaHCO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{CO}_2 + \text{H}_2\text{O}$
- 13  $(\text{NH}_4)_2\text{CO}_3 + \text{H}_3\text{PO}_4 \rightarrow (\text{NH}_4)_3\text{PO}_4 + \text{H}_2\text{O} + \text{CO}_2$
- 14  $\text{Ca} + \text{HNO}_3 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{H}_2$
- 15  $\text{KOH} + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$
- 16  $\text{KHCO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O} + \text{CO}_2$
- 17  $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
- 18  $\text{CaCO}_3 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2$
- 19  $\text{Mg} + \text{H}_3\text{PO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{H}_2$
- 20  $\text{Al}(\text{OH})_3 + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2\text{O}$

- 1  $\text{Ca}(\text{OH})_2 + \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O}$
- 2  $\text{Mg} + \text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2$
- 3  $(\text{NH}_4)_2\text{CO}_3 + \text{H}_3\text{PO}_4 \rightarrow (\text{NH}_4)_3\text{PO}_4 + \text{H}_2\text{O} + \text{CO}_2$
- 4  $\text{KOH} + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4 + \text{H}_2\text{O}$
- 5  $\text{Al}(\text{OH})_3 + \text{H}_3\text{PO}_4 \rightarrow \text{AlPO}_4 + \text{H}_2\text{O}$
- 6  $\text{Ca} + \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2$
- 7  $\text{K}_2\text{CO}_3 + \text{HNO}_3 \rightarrow \text{KNO}_3 + \text{H}_2\text{O} + \text{CO}_2$
- 8  $\text{Ca}(\text{OH})_2 + \text{H}_2\text{SO}_4 \rightarrow \text{CaSO}_4 + \text{H}_2\text{O}$
- 9  $\text{NaHCO}_3 + \text{H}_3\text{PO}_4 \rightarrow \text{Na}_3\text{PO}_4 + \text{H}_2\text{O} + \text{CO}_2$
- 10  $\text{AlCl}_3 + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{Al}(\text{NO}_3)_3$
- 11  $\text{Sn} + \text{HNO}_3 \rightarrow \text{Sn}(\text{NO}_3)_2 + \text{H}_2$
- 12  $\text{Ca}(\text{OH})_2 + \text{H}_3\text{PO}_4 \rightarrow \text{Ca}_3(\text{PO}_4)_2 + \text{H}_2\text{O}$
- 13  $\text{Na}_2\text{CO}_3 + \text{HNO}_3 \rightarrow \text{NaNO}_3 + \text{H}_2\text{O} + \text{CO}_2$
- 14  $\text{Mg} + \text{H}_3\text{PO}_4 \rightarrow \text{Mg}_3(\text{PO}_4)_2 + \text{H}_2$
- 15  $\text{Al}(\text{OH})_3 + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2\text{O}$
- 16  $(\text{NH}_4)_2\text{CO}_3 + \text{HNO}_3 \rightarrow \text{NH}_4\text{NO}_3 + \text{H}_2\text{O} + \text{CO}_2$
- 17  $\text{KHCO}_3 + \text{H}_3\text{PO}_4 \rightarrow \text{K}_3\text{PO}_4 + \text{H}_2\text{O} + \text{CO}_2$
- 18  $\text{Mg} + \text{HNO}_3 \rightarrow \text{Mg}(\text{NO}_3)_2 + \text{H}_2$
- 19  $\text{K}_2\text{CO}_3 + \text{HNO}_3 \rightarrow \text{KNO}_3 + \text{H}_2\text{O} + \text{CO}_2$
- 20  $\text{Al}(\text{OH})_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2\text{O}$