

## Another Balancing Equations Sheet!

*Balance these equations!*

- 1) \_\_\_\_\_  $\text{AlBr}_3$  + \_\_\_\_\_  $\text{K}$   $\rightarrow$  \_\_\_\_\_  $\text{KBr}$  + \_\_\_\_\_  $\text{Al}$
- 2) \_\_\_\_\_  $\text{FeO}$  + \_\_\_\_\_  $\text{PdF}_2$   $\rightarrow$  \_\_\_\_\_  $\text{FeF}_2$  + \_\_\_\_\_  $\text{PdO}$
- 3) \_\_\_\_\_  $\text{P}_4$  + \_\_\_\_\_  $\text{Br}_2$   $\rightarrow$  \_\_\_\_\_  $\text{PBr}_3$
- 4) \_\_\_\_\_  $\text{LiCl}$  + \_\_\_\_\_  $\text{Br}_2$   $\rightarrow$  \_\_\_\_\_  $\text{LiBr}$  + \_\_\_\_\_  $\text{Cl}_2$
- 5) \_\_\_\_\_  $\text{PbBr}_2$  + \_\_\_\_\_  $\text{HCl}$   $\rightarrow$  \_\_\_\_\_  $\text{HBr}$  + \_\_\_\_\_  $\text{PbCl}_2$
- 6) \_\_\_\_\_  $\text{CoBr}_3$  + \_\_\_\_\_  $\text{CaSO}_4$   $\rightarrow$  \_\_\_\_\_  $\text{CaBr}_2$  + \_\_\_\_\_  $\text{Co}_2(\text{SO}_4)_3$
- 7) \_\_\_\_\_  $\text{Na}_3\text{P}$  + \_\_\_\_\_  $\text{CaF}_2$   $\rightarrow$  \_\_\_\_\_  $\text{NaF}$  + \_\_\_\_\_  $\text{Ca}_3\text{P}_2$
- 8) \_\_\_\_\_  $\text{Mn}$  + \_\_\_\_\_  $\text{HI}$   $\rightarrow$  \_\_\_\_\_  $\text{H}_2$  + \_\_\_\_\_  $\text{MnI}_3$
- 9) \_\_\_\_\_  $\text{Li}_3\text{PO}_4$  + \_\_\_\_\_  $\text{NaBr}$   $\rightarrow$  \_\_\_\_\_  $\text{Na}_3\text{PO}_4$  + \_\_\_\_\_  $\text{LiBr}$
- 10) \_\_\_\_\_  $\text{CaF}_2$  + \_\_\_\_\_  $\text{Li}_2\text{SO}_4$   $\rightarrow$  \_\_\_\_\_  $\text{CaSO}_4$  + \_\_\_\_\_  $\text{LiF}$
- 11) \_\_\_\_\_  $\text{HBr}$  + \_\_\_\_\_  $\text{Mg}(\text{OH})_2$   $\rightarrow$  \_\_\_\_\_  $\text{MgBr}_2$  + \_\_\_\_\_  $\text{H}_2\text{O}$
- 12) \_\_\_\_\_  $\text{LiNO}_3$  + \_\_\_\_\_  $\text{CaBr}_2$   $\rightarrow$  \_\_\_\_\_  $\text{Ca}(\text{NO}_3)_2$  + \_\_\_\_\_  $\text{LiBr}$
- 13) \_\_\_\_\_  $\text{AgNO}_3$  + \_\_\_\_\_  $\text{Li}$   $\rightarrow$  \_\_\_\_\_  $\text{LiNO}_3$  + \_\_\_\_\_  $\text{Ag}$
- 14) \_\_\_\_\_  $\text{Si}(\text{OH})_4$  + \_\_\_\_\_  $\text{NaBr}$   $\rightarrow$  \_\_\_\_\_  $\text{SiBr}_4$  + \_\_\_\_\_  $\text{NaOH}$
- 15) \_\_\_\_\_  $\text{NaCN}$  + \_\_\_\_\_  $\text{CuCO}_3$   $\rightarrow$  \_\_\_\_\_  $\text{Na}_2\text{CO}_3$  + \_\_\_\_\_  $\text{Cu}(\text{CN})_2$

## Another Balancing Equations Sheet! – Answers

*Balance these equations!*

**Note to students:** Whenever balancing an equation, it is acceptable to leave spaces blank instead of writing “1” – in chemistry, they mean the same thing.

- 1)  $1 \text{ AlBr}_3 + 3 \text{ K} \rightarrow 3 \text{ KBr} + 1 \text{ Al}$
- 2)  $1 \text{ FeO} + 1 \text{ PdF}_2 \rightarrow 1 \text{ FeF}_2 + 1 \text{ PdO}$
- 3)  $1 \text{ P}_4 + 6 \text{ Br}_2 \rightarrow 4 \text{ PBr}_3$
- 4)  $2 \text{ LiCl} + 1 \text{ Br}_2 \rightarrow 2 \text{ LiBr} + 1 \text{ Cl}_2$
- 5)  $1 \text{ PbBr}_2 + 2 \text{ HCl} \rightarrow 2 \text{ HBr} + 1 \text{ PbCl}_2$
- 6)  $2 \text{ CoBr}_3 + 3 \text{ CaSO}_4 \rightarrow 3 \text{ CaBr}_2 + 1 \text{ Co}_2(\text{SO}_4)_3$
- 7)  $2 \text{ Na}_3\text{P} + 3 \text{ CaF}_2 \rightarrow 6 \text{ NaF} + 1 \text{ Ca}_3\text{P}_2$
- 8)  $2 \text{ Mn} + 6 \text{ HI} \rightarrow 3 \text{ H}_2 + 2 \text{ MnI}_3$
- 9)  $1 \text{ Li}_3\text{PO}_4 + 3 \text{ NaBr} \rightarrow 1 \text{ Na}_3\text{PO}_4 + 3 \text{ LiBr}$
- 10)  $1 \text{ CaF}_2 + 1 \text{ Li}_2\text{SO}_4 \rightarrow 1 \text{ CaSO}_4 + 2 \text{ LiF}$
- 11)  $2 \text{ HBr} + 1 \text{ Mg}(\text{OH})_2 \rightarrow 1 \text{ MgBr}_2 + 2 \text{ H}_2\text{O}$
- 12)  $2 \text{ LiNO}_3 + 1 \text{ CaBr}_2 \rightarrow 1 \text{ Ca}(\text{NO}_3)_2 + 2 \text{ LiBr}$
- 13)  $1 \text{ AgNO}_3 + 1 \text{ Li} \rightarrow 1 \text{ LiNO}_3 + 1 \text{ Ag}$
- 14)  $1 \text{ Si}(\text{OH})_4 + 4 \text{ NaBr} \rightarrow 1 \text{ SiBr}_4 + 4 \text{ NaOH}$
- 15)  $2 \text{ NaCN} + 1 \text{ CuCO}_3 \rightarrow 1 \text{ Na}_2\text{CO}_3 + 1 \text{ Cu}(\text{CN})_2$