**BALANCING CHEMICAL EQUATIONS WORKSHEET**

1. \_\_\_\_\_\_\_\_\_\_ Na3PO4 +\_\_\_\_\_\_\_\_\_\_ KOH 🡪\_\_\_\_\_\_\_\_\_\_ NaOH + \_\_\_\_\_\_\_\_\_\_ K3PO4
2. \_\_\_\_\_\_\_\_\_\_ MgF2 + \_\_\_\_\_\_\_\_\_\_ Li2CO3 🡪 \_\_\_\_\_\_\_\_\_\_ MgCO3 +\_\_\_\_\_\_\_\_\_\_ LiF
3. \_\_\_\_\_\_\_\_\_\_ P4 +\_\_\_\_\_\_\_\_\_\_ O2 🡪 \_\_\_\_\_\_\_\_\_\_ P2O3
4. \_\_\_\_\_\_\_\_\_\_ RbNO3 + \_\_\_\_\_\_\_\_\_\_ BeF2 🡪 \_\_\_\_\_\_\_\_\_\_ Be (NO3)2 +\_\_\_\_\_\_\_\_\_\_RbF
5. \_\_\_\_\_\_\_\_\_\_ AgNO3 + \_\_\_\_\_\_\_\_\_\_Cu 🡪 \_\_\_\_\_\_\_\_\_\_ Cu (NO3)2 +\_\_\_\_\_\_\_\_\_\_Ag
6. \_\_\_\_\_\_\_\_\_\_ CF4 + \_\_\_\_\_\_\_\_\_\_Br2 🡪\_\_\_\_\_\_\_\_\_\_CBr4 +\_\_\_\_\_\_\_\_\_\_F2
7. \_\_\_\_\_\_\_\_\_\_ HCN +\_\_\_\_\_\_\_\_\_\_CuSO4 🡪\_\_\_\_\_\_\_\_\_\_H2SO4 + \_\_\_\_\_\_\_\_\_\_Cu (CN)2
8. \_\_\_\_\_\_\_\_\_\_ GaF3 + \_\_\_\_\_\_\_\_\_\_ Cs 🡪\_\_\_\_\_\_\_\_\_\_CsF +\_\_\_\_\_\_\_\_\_\_Ga
9. \_\_\_\_\_\_\_\_\_\_ BaS + \_\_\_\_\_\_\_\_\_\_PtF2 🡪\_\_\_\_\_\_\_\_\_\_BaF2 + \_\_\_\_\_\_\_\_\_\_PtS
10. \_\_\_\_\_\_\_\_\_\_ N2 + \_\_\_\_\_\_\_\_\_\_ H2 🡪 \_\_\_\_\_\_\_\_\_\_ NH3
11. \_\_\_\_\_\_\_\_\_\_ NaF + \_\_\_\_\_\_\_\_\_\_Br2 🡪 \_\_\_\_\_\_\_\_\_\_NaBr +\_\_\_\_\_\_\_\_\_\_F2
12. \_\_\_\_\_\_\_\_\_\_ Pb(OH)2 + \_\_\_\_\_\_\_\_\_\_HCl 🡪\_\_\_\_\_\_\_\_\_\_H2O +\_\_\_\_\_\_\_\_\_\_PbCl2
13. \_\_\_\_\_\_\_\_\_\_ AlBr3 + \_\_\_\_\_\_\_\_\_\_ K2SO4 🡪\_\_\_\_\_\_\_\_\_\_KBr + \_\_\_\_\_\_\_\_\_\_Al2(SO4)3
14. \_\_\_\_\_\_\_\_\_\_ CH4 + \_\_\_\_\_\_\_\_\_\_O2 🡪 \_\_\_\_\_\_\_\_\_\_CO2 + \_\_\_\_\_\_\_\_\_\_H2O
15. \_\_\_\_\_\_\_\_\_\_ Na3PO4+ \_\_\_\_\_\_\_\_\_\_CaCl2 🡪\_\_\_\_\_\_\_\_\_\_NaCl +\_\_\_\_\_\_\_\_\_\_ Ca3(PO4)2
16. \_\_\_\_\_\_\_\_\_\_ K + \_\_\_\_\_\_\_\_\_\_ Cl2 🡪\_\_\_\_\_\_\_\_\_\_ KCl
17. \_\_\_\_\_\_\_\_\_\_ Al +\_\_\_\_\_\_\_\_\_\_HCl 🡪\_\_\_\_\_\_\_\_\_\_H2 +\_\_\_\_\_\_\_\_\_\_AlCl3
18. \_\_\_\_\_\_\_\_\_\_ N2 + \_\_\_\_\_\_\_\_\_\_ F2 🡪 \_\_\_\_\_\_\_\_\_\_ NF3
19. \_\_\_\_\_\_\_\_\_\_ SO2 + \_\_\_\_\_\_\_\_\_\_ Li2Se 🡪\_\_\_\_\_\_\_\_\_\_SSe2 +\_\_\_\_\_\_\_\_\_\_Li2O
20. \_\_\_\_\_\_\_\_\_\_ NH3 +\_\_\_\_\_\_\_\_\_\_H2SO4 🡪\_\_\_\_\_\_\_\_\_\_ (NH4)2SO4

**Balancing Equations Worksheet**

**Note to students:** It is acceptable to leave spaces blank when balancing equations – blank spaces are interpreted as containing the number “1”.

1. **1** Na3PO4 + **3** KOH 🡪 **3** NaOH + **1** K3PO4
2. **1** MgF2 + **1** Li2CO3 🡪 **1** MgCO3 + **2** LiF
3. **1** P4 + **3** O2 🡪 **2** P2O3
4. **2** RbNO3 + **1** BeF2 🡪 **1** Be(NO3)2 + **2** RbF
5. **2** AgNO3 + **1** Cu 🡪 **1** Cu(NO3)2 + **2** Ag
6. **1** CF4 + **2** Br2 🡪 **1** CBr4 + **2** F2
7. **2** HCN + **1** CuSO4 🡪 **1** H2SO4 + **1** Cu(CN)2
8. **1** GaF3 + **3** Cs 🡪 **3** CsF + **1** Ga
9. **1** BaS + **1** PtF2 🡪 **1** BaF2 + **1** PtS
10. **1** N2 + **3** H2 🡪 **2** NH3
11. **2** NaF + **1** Br2 🡪 **2** NaBr + **1** F2
12. **1** Pb(OH)2 + **2** HCl 🡪 **2** H2O + **1** PbCl2 **2** AlBr3 + **3** K2SO4 🡪 **6** KBr + **1** Al2(SO4)3
13. **1** CH4 + **2** O2 🡪 **1** CO2 + **2** H2O
14. **2** Na3PO4 + **3** CaCl2 🡪 **6** NaCl + **1** Ca3(PO4)
15. **2** K + **1** Cl2 🡪 **2** KCl
16. **2** Al + **6** HCl 🡪 **3** H2 + **2** AlCl3 **1** N2 + **3** F2 🡪 **2** NF3
17. **1** SO2 + **2** Li2Se 🡪 **1** SSe2 + **2** Li2O
18. **2** NH3 + **1** H2SO4 🡪 **1** (NH4)2SO4