**BALANCING CHEMICAL EQUATIONS WORKSHEET**

Note – tough ones will have a coefficient above three, all other problems use coefficients of three or fewer.

1. \_\_\_\_\_\_ Li3PO4 + \_\_\_\_\_\_NaOH 🡪 \_\_\_\_\_\_LiOH + \_\_\_\_\_\_Na3PO4
2. \_\_\_\_\_\_ MgF2 + \_\_\_\_\_\_Li2CO3 🡪 \_\_\_\_\_\_MgCO3 + \_\_\_\_\_\_LiF
3. \_\_\_\_\_\_ P4 + \_\_\_\_\_\_O2 🡪 \_\_\_\_\_\_P2O3
4. \_\_\_\_\_\_ RbNO3 + \_\_\_\_\_\_MgF2 🡪 \_\_\_\_\_\_Mg (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. \_\_\_\_\_\_ SrS + \_\_\_\_\_\_PtF2 🡪 \_\_\_\_\_\_SrF2 + \_\_\_\_\_\_\_PtS
10. \_\_\_\_\_\_ N2 + \_\_\_\_\_\_H2 🡪 \_\_\_\_\_\_NH3
11. \_\_\_\_\_\_ LiF + \_\_\_\_\_\_Br2 🡪 \_\_\_\_\_\_LiBr + \_\_\_\_\_\_F2
12. \_\_\_\_\_\_ Pb (OH) 2 + \_\_\_\_\_\_HCl 🡪 \_\_\_\_\_\_H2O + \_\_\_\_\_\_PbCl2
13. \_\_\_\_\_\_ GaBr3 + \_\_\_\_\_\_Na2CO3 🡪 \_\_\_\_\_\_NaBr + \_\_\_\_\_\_Ga2 (CO3)3
14. \_\_\_\_\_\_ CH4 + \_\_\_\_\_\_O2 🡪 \_\_\_\_\_\_CO2 + \_\_\_\_\_\_H2O
15. \_\_\_\_\_\_ Li3PO4 + \_\_\_\_\_\_CaCl2 🡪 \_\_\_\_\_\_LiCl + \_\_\_\_\_\_Ca3 (PO4)2
16. \_\_\_\_\_\_ Na + \_\_\_\_\_\_Cl2 🡪 \_\_\_\_\_\_NaCl
17. \_\_\_\_\_\_ Ga + \_\_\_\_\_\_HCl 🡪 \_\_\_\_\_\_H2 + \_\_\_\_\_\_GaCl3
18. \_\_\_\_\_\_ N2 + \_\_\_\_\_\_F2 🡪 \_\_\_\_\_\_NF3
19. \_\_\_\_\_\_ SO2 + \_\_\_\_\_\_Li2Se 🡪 \_\_\_\_\_\_SSe2 + \_\_\_\_\_\_Li2O

**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. **p**
2. **1** GaF3 + **3** Cs 🡪 **3** CsF + **1** Ga
3. **1** SrS + **1** PtF2 🡪 **1** SrF2 + **1** PtS
4. **1** N2 + **3** H2 🡪 **2** NH3
5. **2** LiF + **1** Br2 🡪 **2** LiBr + **1** F2
6. **1** Pb (OH) 2 + **2** HCl 🡪 **2** H2O + **1** PbCl2
7. **2** GaBr3 + **3** Na2CO3 🡪 **6** NaBr + **1** Ga2 (CO3)3
8. **1** CH4 + **2** O2 🡪 **1** CO2 + **2** H2O
9. **2** Li3PO4 + **3** CaCl2 🡪 **6** LiCl + **1** Ca3 (PO4)2
10. **2** Na + **1** Cl2 🡪 **2** NaCl
11. **2** Ga + **6** HCl 🡪 **3** H2 + **2** GaCl3
12. **1** N2 + **3** F2 🡪 **2** NF3
13. **1** SO2 + **2** Li2Se 🡪 **1** SSe2 + **2** Li2O
14. **2** NH3 + **1** H2SO4 🡪 **1** (NH4)2SO4