**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_**

**Balancing Chemical Reactions Practice #1**

***Directions****: Balance the following reactions. Remember, you have to have the same number of each element on each side of the equation.*

***SYNTHESIS REACTIONS***

1. \_\_\_\_C + \_\_\_\_\_H2 → \_\_\_\_\_\_C3H8
2. \_\_\_\_C2 + \_\_\_\_\_H2 → \_\_\_\_\_C2H6
3. \_\_\_\_\_Fe2O3 + \_\_\_\_\_H2O → \_\_\_\_Fe(OH)3
4. \_\_\_\_\_O2 + \_\_\_\_\_H2 → \_\_\_\_H2O
5. \_\_\_\_\_N2 + \_\_\_\_\_O2 → \_\_\_\_\_N4O6

***DECOMPOSITION REACTIONS***

1. \_\_\_\_\_O3 → \_\_\_\_\_O + \_\_\_\_\_O2
2. \_\_\_\_\_Fe(OH)3 → \_\_\_\_\_Fe2O3 + \_\_\_\_\_H2O
3. \_\_\_\_\_NO2 → \_\_\_\_\_N2 + \_\_\_\_\_O2
4. \_\_\_\_\_H2CO3 → \_\_\_\_\_CO2 + \_\_\_\_\_H2O
5. \_\_\_\_\_Na2O → \_\_\_\_\_Na + \_\_\_\_\_O2

***SINGLE REPLACEMENT REACTIONS***

1. \_\_\_\_\_Ag + \_\_\_\_\_Cu(SO4) → \_\_\_\_\_Ag2(SO4) + \_\_\_\_\_Cu
2. \_\_\_\_\_Mn + \_\_\_\_\_LiBr → \_\_\_\_\_MnBr4 + \_\_\_\_\_Li
3. \_\_\_\_\_Ga + \_\_\_\_\_Al(NO3)3 → \_\_\_\_\_Ga(NO3)3 + \_\_\_\_\_Al
4. \_\_\_\_\_Cs + \_\_\_\_\_AlCl3 → \_\_\_\_\_CsCl + \_\_\_\_\_Al
5. \_\_\_\_\_Zn + \_\_\_\_\_Au(NO2)2 → \_\_\_\_\_Zn(NO2)2 + \_\_\_\_\_Au

***DOUBLE REPLACEMENT REACTIONS***

1. \_\_\_\_\_NaI + \_\_\_\_\_ Pb(SO4)2 → \_\_\_\_\_PbI4 + \_\_\_\_\_Na2(SO4)
2. \_\_\_\_\_H(NO3) + \_\_\_\_\_ Mg(OH)2 → \_\_\_\_\_H(OH) + \_\_\_\_\_Mg(NO3)2
3. \_\_\_\_\_H3(PO4) + \_\_\_\_\_ NaBr → \_\_\_\_\_HBr + \_\_\_\_\_Na3(PO4)
4. \_\_\_\_\_CaO + \_\_\_\_\_ MnI­4 → \_\_\_\_\_CaI2 + \_\_\_\_\_MnO2
5. \_\_\_\_\_VF5 + \_\_\_\_\_ HI → \_\_\_\_\_HF + \_\_\_\_\_V2I10

***COMBUSTION REACTIONS***

1. \_\_\_\_\_C6H6 + \_\_\_\_\_O2 → \_\_\_\_\_H2O + \_\_\_\_\_CO2
2. \_\_\_\_\_C6H12 + \_\_\_\_\_O2 → \_\_\_\_\_H2O + \_\_\_\_\_CO2
3. \_\_\_\_\_C4H8 + \_\_\_\_\_O2 → \_\_\_\_\_H2O + \_\_\_\_\_CO2
4. \_\_\_\_\_C3H6O + \_\_\_\_\_O2 → \_\_\_\_\_H2O + \_\_\_\_\_CO2
5. \_\_\_\_\_CH4 + \_\_\_\_\_O2 → \_\_\_\_\_H2O + \_\_\_\_\_CO2