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| **Date** | **Topic** | **Ms. Kline’s Class** |
| M – Mar 15 | Predicting Products for Synthesis/Decomposition Reactions | 1-3all |
| T – Mar 16 | Predicting Products for Single Replacement/Double Replacement | 4-5all |
| W – Mar 17 | Predicting Products Review | 6, Pre-Lab |
| Th – Mar 18 | Predicting Products Lab | Lab Conclusion Questions |
| F – Mar 19 | Solubility | 7all |

**\*Complete the following problems on a separate sheet of paper in your chemistry notebook.**

1. Determine if the following reactions are synthesis, decomposition, single replacement, double replacement, or combustion reactions.
   1. 4 Fe(s) + 3 O2(g) 🡪 2 Fe2O3(s)
   2. FeCl2 (aq) + Na2S (aq) 🡪 FeS (s) + 2NaCl (aq)
   3. Zn (s) + CuCl2 (aq) 🡪 ZnCl2 (aq) + Cu (s)
   4. CaCO3 (s) 🡪 CaO (s) + CO2 (g)
   5. 2 Al (s) + 3 H2SO4 (aq) 🡪 3 H2 (g) + Al2(SO4)2 (aq)
   6. C3H8 (s) + 5O2 (g) 🡪 3CO2(g) + 4H2O
   7. C (s) + Fe2O3 (s) 🡪 CO (g) + Fe (s)
   8. CO2 (g) + H2O (l) 🡪 H2CO3 (aq)
2. Describe the types of reactions and what differentiates them from each other.
   1. Synthesis
   2. Decomposition
3. Describe the types of reactions and what differentiates them from each other.
   1. Single displacement
   2. Double displacement
   3. Combustion
4. Determine what type of reaction would occur. Then predict the products and balance the equation.
   1. Ba + Cl2 🡪
   2. CaF2 🡪
   3. KI 🡪
   4. Li + Br2 🡪
5. Determine what type of reaction would occur. Then predict the products and balance the equation.
   1. C2H8 + O2 🡪
   2. BaCl2 + F2 🡪
   3. LiF + Br2 🡪
   4. NaBr + CaCl2 🡪
6. Balance the following reactions. Then determine the type of reaction. **SHOW ALL WORK TO RECEIVE CREDIT!!!**
   1. \_\_\_P4 + \_\_\_\_O2 🡪 \_\_\_P2O5 Reaction Type?
   2. \_\_\_C4H12 + \_\_\_O2 🡪 \_\_\_CO2 + \_\_\_H2O Reaction Type?
   3. \_\_\_\_ NaBr + \_\_\_\_ Ca(OH)2 🡪 \_\_\_ CaBr2 + \_\_\_\_ NaOH Reaction Type?
   4. \_\_\_\_ Pb + \_\_\_\_ H3PO4 🡪 \_\_\_\_ H2 + \_\_\_\_ Pb3(PO4)2 Reaction Type?
7. Determine what type of reaction would occur. Then predict the products and balance the equation.
   1. CaCl2 + AgBr 🡪
   2. C4H8 + O2 🡪
   3. Li3N + Cl2 🡪
   4. NO 🡪
   5. Al + O2 🡪
   6. NaCl 🡪