I. For each of the following reactions, name the reaction type, complete the reaction, and balance it:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. \_\_\_\_\_ Zn + \_\_\_\_\_ HCl 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_ Al + \_\_\_\_\_ HNO3 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_ Al + \_\_\_\_\_ AgC2H3O2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_ Sr + \_\_\_\_\_ NaI 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_ CO2 + \_\_\_\_\_ H2O 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_\_\_\_\_ Rb + \_\_\_\_\_ SrSO4 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7. \_\_\_\_\_ Cs + \_\_\_\_\_ H3PO4 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8. \_\_\_\_\_ Cs + \_\_\_\_\_ O2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9. \_\_\_\_\_ Ag + \_\_\_\_\_ Fe(C2H3O2)2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10. \_\_\_\_\_ AgNO3 + \_\_\_\_\_ Ca 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11. \_\_\_\_\_ Al + \_\_\_\_\_ ZnSO4 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12. \_\_\_\_\_ CuCl 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13. \_\_\_\_\_ Pt(NO3)4 + \_\_\_\_\_ Ag 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 14. \_\_\_\_\_ NaBr 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 15. \_\_\_\_\_ NaCl + \_\_\_\_\_ Ba 🡪

II. For each of the following, name the reaction type, give the correct formula equation, complete the equation, and

 balance:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. barium + magnesium chlorate 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. lead + iron(III) chloride 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. sodium phosphate + lithium 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. lithium + copper(I) oxide 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. zinc + silver nitrate 🡪

For each of the following, name the reaction type, complete the reaction, and balance:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. \_\_\_\_\_ CaBr2(aq) + \_\_\_\_\_ Na2CO3(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_ CuBr2(aq) + \_\_\_\_\_ K2CrO4(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_ Al + \_\_\_\_\_ CuNO3 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_ FeCl3(aq) + \_\_\_\_\_ Li2S(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_ NaNO3(aq) + \_\_\_\_\_ KCl(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. silver nitrate(aq) + potassium hydroxide(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7. barium hydroxide(aq) + sodium sulfate(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8. zinc nitrate(aq) + sodium acetate(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9. copper(II) chloride(aq) + ammonium carbonate(aq) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10. iron(II) bromide(aq) + ammonium phosphate(aq) 🡪

I. For each of the following, name the reaction type, complete the reaction, and balance:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. \_\_\_\_\_ C5H12(l) + \_\_\_\_\_ O2(g) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_ C4H10(g) + \_\_\_\_\_ O2(g) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_ C5H10(l) + \_\_\_\_\_ O2(g) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_ C6H6(l) + \_\_\_\_\_\_ O2(g) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_ C6H14(l) + \_\_\_\_\_ O2(g) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_\_\_\_\_ C4H9OH(l) + \_\_\_\_\_ O2(g) 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7. \_\_\_\_\_ C3H7OH(l) + \_\_\_\_\_ O2(g) 🡪

I. For each of the following, name the reaction type (synth or decomp) and balance the equation:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. \_\_\_\_\_ H2O 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_ Al2O3 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_ Ca + \_\_\_\_\_ O2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_ K + \_\_\_\_\_ I2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_ Rb2O 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_\_\_\_\_ SO3 + \_\_\_\_\_ H2O 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7. \_\_\_\_\_ H2O + \_\_\_\_\_ N2O5 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8. \_\_\_\_\_ Ag + \_\_\_\_\_ O2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9. \_\_\_\_\_ Zn + \_\_\_\_\_ N2 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10. \_\_\_\_\_ Al + \_\_\_\_\_ S8 🡪

II. For each of the following, name the reaction type, give the correct formula equation, then balance the equation:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. zinc nitride 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. aluminum + nitrogen 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. barium + fluorine 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. magnesium bromide 🡪

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. tetraphosphorus decoxide + water 🡪