Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_

**Predicting Products of Synthesis & Combustion Reactions**

**(Worksheet B)**

*Write the balanced chemical equation for the following synthesis reactions.*

1. \_\_\_\_ Ca + \_\_\_\_ N2 🡪
2. \_\_\_\_ K + \_\_\_\_ O2 🡪
3. \_\_\_\_ Mg + \_\_\_\_ P 🡪
4. \_\_\_\_ Ni (II) + \_\_\_\_ Cl2 🡪

*Write the balanced chemical equations for the following combustion reactions.*

1. \_\_\_\_ CH4 + \_\_\_\_ O2 🡪
2. \_\_\_\_ C2H4 + \_\_\_\_ O2 🡪
3. \_\_\_\_ C5H12 + \_\_\_\_ O2 🡪
4. \_\_\_\_ C3H8O + \_\_\_\_ O2 🡪

*Mixed Practice: Identify the type of reaction (combustion or synthesis), predict the products, and balance the chemical equation.*

1. \_\_\_\_ C3H8 + \_\_\_\_ O2 🡪
2. \_\_\_\_ Al + \_\_\_\_ S 🡪
3. \_\_\_\_ Rb + \_\_\_\_ F2 🡪
4. \_\_\_\_ C7H16 + \_\_\_\_ O2 🡪
5. \_\_\_\_ C2H6 + \_\_\_\_ O2 🡪
6. \_\_\_\_ Li + \_\_\_\_ O2 🡪
7. \_\_\_\_ Rb + \_\_\_\_ Se 🡪
8. \_\_\_\_ C2H5OH + \_\_\_\_ O2 🡪
9. \_\_\_\_ Li + \_\_\_\_ Br2 🡪