Name: _____

Date: _____ Block: _____

**Predicting Products of Chemical reactions**

Directions: First, determine the type of reaction: a) single replacement b) double replacement c) synthesis d) decomposition and e) combustion. Secondly, predict the products in the reaction and write the correct chemical formula for each product. Finally, balance each reaction using the correct coefficients.

1. **Double replacement** $2\ AgNO_3 + CaCl_2 \rightarrow 2\ AgCl + Ca(NO_3)_2$

2. _____ $Al + Cl_2 \rightarrow$

3. _____ $HgCl_2 + KOH \rightarrow$

4. _____ $C_4H_8 + O_2 \rightarrow$

5. _____ $Al_2(SO_4)_3 + Pb(NO_3)_2 \rightarrow$

6. _____ $Ba + MgI_2 \rightarrow$

7. _____ $Ca(OH)_2 + HeaI \rightarrow$

8. _____ $H_2SO_4 + KOH \rightarrow$

9. _____ $Zn + HCl \rightarrow$
(Zinc is a 2+ ion.)

10. _____ $K + Br_2 \rightarrow$

11. _____ $Mg + Fe(NO_3)_3 \rightarrow$

12. _____ $NaOH + HCl \rightarrow$

13. _____ $C_4H_{10} + O_2 \rightarrow$

14. _____ $H_2CO_3 \rightarrow$

15. _____ $Cu + O_2 \rightarrow$

16. _____ $2\ NaI + Cu(NO_3)_2 \rightarrow$