NAME: **HONORS CHEMISTRY**

SECTION: Predicting Products of Chemical Reactions

Directions:

First, classify the following reactions as synthesis, decomposition, single replacement, double displacement, or combustion, based on the nature of the reactants. Then, predict the products and balance the equation, using the lowest whole number coefficients. Make sure the formulas of your products are written correctly before balancing. Finally, determine if the reaction is a redox reaction.

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| **Class of reaction** | **Predict products and balance** | **Redox (Y/N)?** |
|  | \_\_\_\_ Ca + \_\_\_\_ Al(NO2)3 → |  |
|  | \_\_\_\_ C4H10 + \_\_\_\_ O2 → |  |
|  | \_\_\_\_ Ba(OH)2 + \_\_\_\_ HClO4 → |  |
|  | \_\_\_\_ GaN → |  |
|  | \_\_\_\_ Ba + \_\_\_\_ H3PO4 → |  |
|  | \_\_\_\_ Ag2O → |  |
|  | \_\_\_\_ Ca + \_\_\_\_ Br2 → |  |
|  | \_\_\_\_ AlBr3 + \_\_\_\_ Cl2 → |  |
|  | \_\_\_\_ AgNO3 + \_\_\_\_ Na2SO4 → |  |
|  | \_\_\_\_ AuCl → |  |
|  | \_\_\_\_ C6H6 + \_\_\_\_ O2 → |  |
|  | \_\_\_\_ Li + \_\_\_\_ P4 → |  |