

CH 151 Quiz #4 Name: \_\_\_\_\_

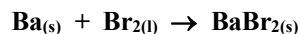
Be sure to show all work, use the correct number of significant figures, circle final answers and use correct units in all problems.  
*Remember the seven diatomicss* Do not worry about states of matter when balancing.

**ANSWERS appear in BOLD.**

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1. Write and balance the following reactions: (14 points)

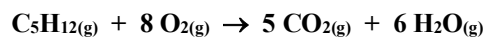
a. Barium bromide is formed from its elements



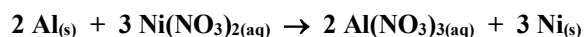
b. Iron(III) sulfide decomposes to its elements



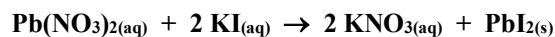
c. Combustion of pentane, C<sub>5</sub>H<sub>12</sub>.



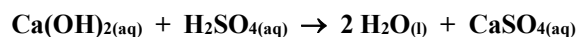
d. Al + Ni(NO<sub>3</sub>)<sub>2</sub> → ????



e. Pb(NO<sub>3</sub>)<sub>2</sub>(aq) + KI(aq) → PbI<sub>2</sub>(s) + KNO<sub>3</sub>(aq)



f. Ca(OH)<sub>2</sub>(aq) + H<sub>2</sub>SO<sub>4</sub>(aq) → ????



2. Classify each of the above reactions: (1 point each) Use the terms **combustion**, **acid-base**, **single replacement**, **precipitation**, **combination** or **decomposition** when classifying the reactions.

a. **combination**

d. **single replacement**

b. **decomposition**

e. **precipitation**

c. **combustion**

f. **acid-base**