Quiz 4. TAKE HOME. Due R 4/5 at 7:10 p.m.

A. Completing and Balancing Reactions

- 1. Refer to the activity series for the single replacement reactions & write NR if the reaction will not occur. Complete and balance the reactions that do occur. (7 pt)
 - a) $_$ Au(NO₃)₃ (aq) + $_$ Mg (s) \rightarrow
 - b) __ NaCl (aq) + __ Al (s) \rightarrow
 - c) __ PbCl₂ (aq) + __ Na (s) \rightarrow
- 2. Complete and balance the following acid base neutralization and combustion reactions. (6 pts)
 - a) $__C_4H_{10}O(I) + __O_2(g) \rightarrow$
 - b) $_$ H₃PO₄ (aq) + $_$ NaOH (aq) \rightarrow
- B. SHOW WORK and include units for answers! (Can attach work)
- 1. What is the molar mass of $Co_2(CrO_4)_3$? (1 pt)
- 2. How many moles are there in 21.5 g of $(NH_4)_3PO_4$? (2 pts)
- 3. How many grams is 6.65 moles of $Mg(C_2H_3O_2)_2$? (2 pts)
- 4. What is the mass of 13.5 L of $N_2O_4(g)$ at STP? (3 pts)
- 5. What is the % composition of $Fe_2(SO_4)_3$? (4 pts)