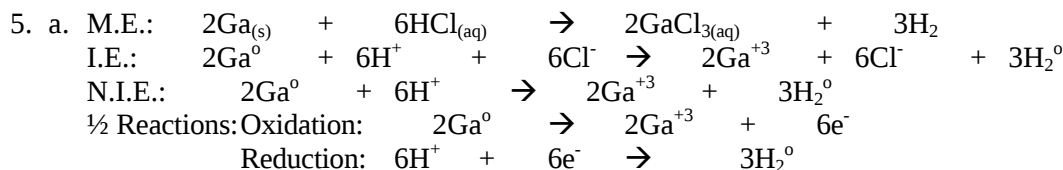
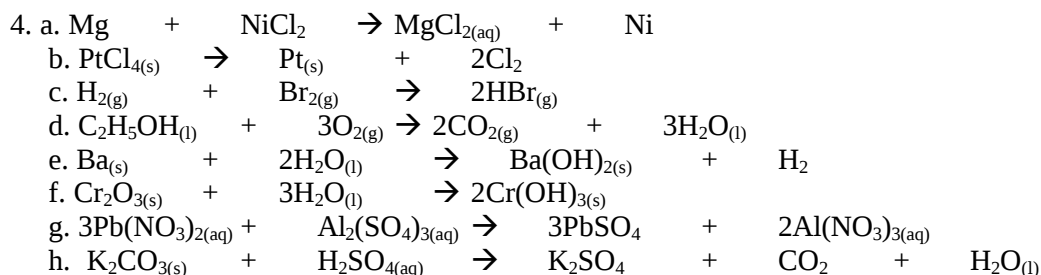
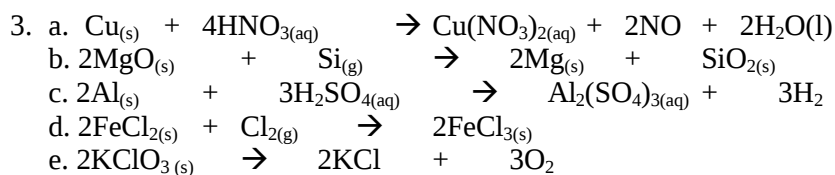


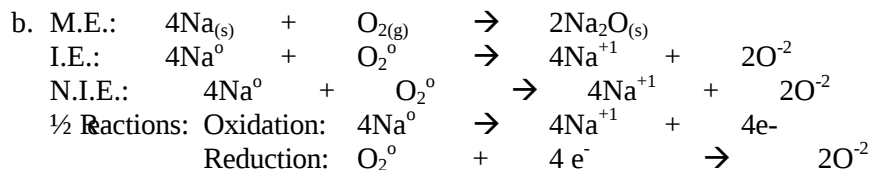
Unit V. Review Worksheet Answers.

1. a. lithium hydroxide b. aluminum nitrate c. lead(II) chloride or plumbous chloride
d. sulfur hexafluoride e. calcium hydrogen carbonate or calcium bicarbonate f. dinitrogen pentoxide

2. a. $\text{Ca}(\text{ClO}_4)_2$ b. $(\text{NH}_4)_3\text{PO}_4$ c. PCl_5 d. $\text{Al}_2(\text{C}_2\text{O}_4)_3$ e. CrPO_4 f. ClO_2 g. SnF_4 h. $\text{Sc}_2(\text{SO}_4)_3$



****This problem is different between in-class handout (March '03) and what is found on the net.**



6. a. 334 g C_4H_{10} b. 0.051 g S (0.074 g Na) c. 16.7 g CO_2 d. 1.19×10^{22} molecules $\text{C}_9\text{H}_8\text{O}_4$ e. 60 mol Teflon

7. a. 6.65% Al b. 35.0% N c. 36.2% O

8. a. CS_2 b. KH_2PO_4 c. CH_2O d. $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ (this is a formula for a hydrate) e. GaP

9. a. EF = CH_3 MF = C_3H_6 b. EF = NO_2 MF = N_2O_4 c. EF = $\text{C}_4\text{H}_5\text{N}_2\text{O}$ MF = $\text{C}_8\text{H}_{10}\text{N}_4\text{O}_2$ d. EF = NH_2Cl MF = NH_2Cl

10. a. 2.5 mol Ga b. 130 g Ga c. 0.587 g GaCl_3 d. 9.036 L H_2 e. 22.6 g H_2

11. a. HNO_3 is limiting; 3.0 mol H_2O b. HNO_3 is limiting; 19.9 g KNO_3 c. 36.1 g K_2CO_3

12. a. 0.4116 mol $\text{HC}_2\text{H}_3\text{O}_2$ b. 24.7 g $\text{HC}_2\text{H}_3\text{O}_2$ excess, 32.55 g $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$
c. 540 g $\text{HC}_2\text{H}_3\text{O}_2$ limiting; 2.562×10^{24} molecules H_2O

13. a. 31% b. T.Y. = 0.783 g O_2 ; 92.0% c. 61.4 g Br_2 excess; T.Y. = 60.3 g $\text{C}_6\text{H}_5\text{Br}$; 94.0%