

College Prep Chemistry of the Earth System

Assignment 5F 30 Pts Total

Double Replacement w/Polyatomic Balancing

For the following chemical equations balance the equation. Show balancing chart.

1. $\underline{\quad} \text{Ca(OH)}_2 + \underline{\quad} \text{Zn}_2\text{SO}_4 \rightarrow$
 $\underline{\quad} \text{CaSO}_4 + \underline{\quad} \text{ZnOH}$
2. $\underline{\quad} \text{Al(ClO}_3)_3 + \underline{\quad} \text{MgSO}_4 \rightarrow$
 $\underline{\quad} \text{Al}_2(\text{SO}_4)_3 + \underline{\quad} \text{Mg(ClO}_3)_2$
3. $\underline{\quad} \text{K}_3\text{PO}_4 + \underline{\quad} \text{Ca(NO}_3)_2 \rightarrow$
 $\underline{\quad} \text{KNO}_3 + \underline{\quad} \text{Ca}_3(\text{PO}_4)_2$
4. $\underline{\quad} \text{SrCl}_2 + \underline{\quad} \text{V}_2(\text{CO}_3)_3 \rightarrow$
 $\underline{\quad} \text{SrCO}_3 + \underline{\quad} \text{VCl}_3$
5. $\underline{\quad} \text{Y}_2\text{O}_3 + \underline{\quad} \text{Ni(C}_2\text{H}_3\text{O}_2)_2 \rightarrow$
 $\underline{\quad} \text{Y(C}_2\text{H}_3\text{O}_2)_3 + \underline{\quad} \text{NiO}$
6. $\underline{\quad} \text{Pb(C}_2\text{O}_4)_2 + \underline{\quad} \text{Cr(OH)}_2 \rightarrow$
 $\underline{\quad} \text{Pb(OH)}_4 + \underline{\quad} \text{CrC}_2\text{O}_4$
7. $\underline{\quad} \text{CuPO}_4 + \underline{\quad} \text{Zn}_2\text{CO}_3 \rightarrow$
 $\underline{\quad} \text{Cu}_3(\text{CO}_3)_2 + \underline{\quad} \text{Zn}_3\text{PO}_4$
8. $\underline{\quad} \text{Zr}_2\text{CrO}_4 + \underline{\quad} \text{Fe(OH)}_3 \rightarrow$
 $\underline{\quad} \text{ZrOH} + \underline{\quad} \text{Fe}_2(\text{CrO}_4)_3$
9. $\underline{\quad} \text{Pd(IO}_3)_2 + \underline{\quad} \text{Sn(SO}_4)_2 \rightarrow$
 $\underline{\quad} \text{PbSO}_4 + \underline{\quad} \text{Sn(IO}_3)_4$
10. $\underline{\quad} \text{W(CO}_3)_3 + \underline{\quad} \text{Ni(NO}_3)_3 \rightarrow$
 $\underline{\quad} \text{W(NO}_3)_6 + \underline{\quad} \text{Ni}_2(\text{CO}_3)_3$