ROSEDALE ACADEMY

Name_____

SCH4U: 5-1D: Oxidation Numbers Practice

Instructions:
Determine the oxidation numbers for all species in the following redox reactions

1. $Fe_2O_3 + S \rightarrow Fe + SO_2$

2. $NH_3 + O_2 \rightarrow NO + H_2O$

3. $P_4 + H_2O + HNO_3 \rightarrow H_3PO_4 + NO$

4. $Cr_2O_7^{2-} + I^- \rightarrow Cr^{3+} + I_3^-$

5. $ClO_3^- + Cl^- \rightarrow Cl_2 + ClO_2$

6. $MnO_4^- + C_2O_4^{2-} \rightarrow CO_2 + Mn^{2+}$

7. $MnO_4^- + C_2O_4^{2-} \rightarrow CO_2 + MnO_2$

8. $Zn + NO_3^- \rightarrow Zn(OH)_4^{2-} + NH_3$

9. $ClO_2 \rightarrow ClO_2^- + ClO_3^-$

10. $Br_{2\,(l)} \rightarrow BrO_3^-{}_{(aq)} + Br^-{}_{(aq)}$