$\qquad$

1) $\mathrm{NbO}_{2}+\mathrm{W} \rightarrow \mathrm{Nb}+\mathrm{WO}_{4}{ }^{2-}$
a) Write BOTH half reactions.
b) Balance the redox reaction in acidic conditions.
c) Balance the redox reaction in basic conditions.
2) $\mathrm{I}_{2}+\mathrm{OCl}^{-1} \rightarrow \mathrm{IO}_{3}^{-1}+\mathrm{Cl}^{-1}$
a) Write the BOTH half reactions.
b) Balance the redox reaction in acidic conditions.
c) Balance the redox reaction in basic conditions.
3) $\mathrm{As}+\mathrm{ClO}_{3}^{-1} \rightarrow \mathrm{H}_{3} \mathrm{AsO}_{3}+\mathrm{HClO}$
a) Write the BOTH half reactions.
b) Balance the redox reaction in acidic conditions.
c) Balance the redox reaction in basic conditions.
