$\qquad$ Identifying Redox Reactions WS

Instructions: Determine which of the following equations represent redox reactions. If it is a redox reaction, determine which element is oxidized and which is reduced.

1) $\mathrm{NaCl}(\mathrm{aq})+\mathrm{AgNO}_{3}(\mathrm{aq}) \rightarrow \mathrm{NaNO}_{3}(\mathrm{aq})+\mathrm{AgCl}(\mathrm{s})$
2) $\mathrm{I}_{2} \mathrm{O}_{5}(\mathrm{~s})+5 \mathrm{CO}(\mathrm{g}) \rightarrow \mathrm{I}_{2}(\mathrm{~s})+5 \mathrm{CO}_{2}(\mathrm{~g})$
3) $\mathrm{Zn}(\mathrm{s})+2 \mathrm{HBr}(\mathrm{aq}) \rightarrow \mathrm{ZnBr}_{2}(\mathrm{aq})+\mathrm{H}_{2}(\mathrm{~g})$
4) $\mathrm{PbO}_{2}+4 \mathrm{HBr} \rightarrow \mathrm{PbBr}_{2}+\mathrm{Br}_{2}+2 \mathrm{H}_{2} \mathrm{O}$
5) $\mathrm{SO}_{3}(\mathrm{~g})+\mathrm{H}_{2} \mathrm{O}(\mathrm{I}) \rightarrow \mathrm{H}_{2} \mathrm{SO}_{4}(\mathrm{aq})$
