## Oxidation Numbers

Using Ups & Downs Attach this to the Unit 26 Assignment.

Name Period	
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Watch out for Temporary Twos & Diatomic Elements.

Diatomic Elements (H<sub>2</sub> O<sub>2</sub> N<sub>2</sub> Cl<sub>2</sub> Br<sub>2</sub> I<sub>2</sub> F<sub>2</sub>) are diatomic only when FREE. Not as ions or in compds.

1. 
$$Cr_2O_7^{-2} + Fe^{+2} + H^{+1} \longrightarrow Cr^{+3} + Fe^{+3} + H_2O$$

2. 
$$MnO_2^{-1} + Sn^{+2} + H^{+1} \longrightarrow Mn^{+2} + Sn^{+4} + H_2O$$

3. 
$$NO_3^{-1} + Cl^{-1} + H^{+1} \longrightarrow NO + Cl_2 + H_2O$$

4. 
$$NO_2 + H_2O + Mn^{+2} \longrightarrow NO_3^{-1} + Mn + H^+$$

5. 
$$Cr^{+3} + I_2 + H_2O \longrightarrow Cr_2O_7^{-2} + H^{+1} + I^{-1}$$

6. 
$$AsO_4^{-3} + NO + H^+ \longrightarrow NO_3^{-1} + As_2O_3 + H_2O$$

7. 
$$Cu + NO_3^{-1} + H^+ \longrightarrow Cu^{+2} + NO + H_2O$$

8. 
$$Sb + SO_4^{-2} + H^{+1} \longrightarrow SO_2 + Sb^{+3} + H_2O$$

9. 
$$Cl^{-1} + NO_3^{-1} + H^+ \longrightarrow ClO^{-1} + NO + H_2O$$

10. 
$$MnO_4^{-1} + Sn^{+2} + H^+ \longrightarrow Mn^{+2} + Sn^{+4} + H_2O$$