

## CHEMISTRY DAILY PLAN

**Class:**

**Date:**

**Subject:** *Oxidation Numbers*

**Time:**

In order to write the chemical formulas, following oxidation numbers of elements must be known.

**Oxidation numbers (charges) of some common elements.**

+1	+2		+3	-3	-2	-1
H <sup>+</sup>	Mg <sup>+2</sup>	Ca <sup>+2</sup>	Al <sup>+3</sup>	N <sup>-3</sup> (nitride)	O <sup>-2</sup> (oxide)	F <sup>-</sup> (fluoride)
Na <sup>+</sup>	Sr <sup>+2</sup>	Ba <sup>+2</sup>	Fe <sup>+3</sup>	P <sup>-3</sup> (phosphide)	S <sup>-2</sup> (sulfide)	Cl <sup>-</sup> (chloride)
K <sup>+</sup>	Zn <sup>+2</sup>	Fe <sup>+2</sup>	Cr <sup>+3</sup>			Br <sup>-</sup> (bromide)
Ag <sup>+</sup>	Mn <sup>+2</sup>	Ni <sup>+2</sup>	Co <sup>+3</sup>			I <sup>-</sup> (iodide)
Cu <sup>+</sup>	Cu <sup>+2</sup>	Cd <sup>+2</sup>				
Hg <sup>+</sup>	Pb <sup>+2</sup>	Hg <sup>+2</sup>				

Some important polyatomic ions with their names and oxidation numbers (charges).

+1	-3	-2	-1
NH <sub>4</sub> <sup>+</sup> Ammonium	PO <sub>4</sub> <sup>-3</sup> Phosphate	SO <sub>4</sub> <sup>-2</sup> Sulfate	OH <sup>-</sup> Hydroxide
H <sub>3</sub> O <sup>+</sup> Hydronium	PO <sub>3</sub> <sup>-3</sup> Phosphite	SO <sub>3</sub> <sup>-2</sup> Sulfite	NO <sub>3</sub> <sup>-</sup> Nitrate
		CO <sub>3</sub> <sup>-2</sup> Carbonate	NO <sub>2</sub> <sup>-</sup> Nitrite
		CrO <sub>4</sub> <sup>-2</sup> Chromate	MnO <sub>4</sub> <sup>-</sup> Permanganate
		Cr <sub>2</sub> O <sub>7</sub> <sup>-2</sup> Dichromate	CN <sup>-</sup> Cyanide
		C <sub>2</sub> O <sub>4</sub> <sup>-2</sup> Oxalate	CH <sub>3</sub> COO <sup>-</sup> Acetate
		MnO <sub>4</sub> <sup>-2</sup> Manganate	ClO <sub>4</sub> <sup>-</sup> Perchlorate
			ClO <sub>3</sub> <sup>-</sup> Chlorate
			ClO <sub>2</sub> <sup>-</sup> Chlorite
			ClO <sup>-</sup> Hypochlorite