## **AP Chemistry SUMMER WORK:**

- 1. MEMORIZE all of your Polyatomic ions
- 2. Know all of your nomenclature
- 3. Know the following Mathematical concepts
  - a. Metrics
  - b. Dimensional Analysis (Factor Label Method)
  - c. Density
  - d. Significant figures
  - e. Percent error
  - f. Scientific Notation

THERE WILL BE AN ASSESSMENT WITHIN THE FIRST COUPLE OF DAYS OF SCHOOL NEXT YEAR.

## Common Polyatomic Ions

	0110-
acetate	C <sub>2</sub> H <sub>3</sub> O <sub>2</sub>
ammonium	NH <sub>4</sub> <sup>+</sup>
arsenate	AsO <sub>4</sub> <sup>3</sup>
arsenite	AsO <sub>3</sub> <sup>3</sup> -
azide	$N_3^-$
benzoate	$C_7H_5O_2^-$
borate	$BO_3^{3-}$
bromate	BrO <sub>3</sub> <sup>-</sup>
carbonate	$CO_3^2$
chlorate	CIO <sub>3</sub> <sup>-</sup>
chlorite	CIO <sub>2</sub>
chromate	CrO <sub>4</sub> <sup>2</sup> -
cyanide	CN-
dichromate	$Cr_2O_7^{2-}$
dihydrogen phosphate	$H_2PO_4^-$
dihydrogen phosphite	H <sub>2</sub> PO <sub>3</sub> <sup>-</sup>
hydrogen carbonate	HCO <sub>3</sub> <sup>-</sup>
hydrogen phosphate	HPO <sub>4</sub> <sup>2-</sup>
hydrogen phosphite	HPO <sub>3</sub> <sup>2</sup> -
hydrogen sulfate	HSO <sub>4</sub> ⁻
hydrogen sulfide	HS <sup>-</sup>
hydrogen sulfite	HSO <sub>3</sub> <sup>-</sup>
hydroxide	OH-
hypochlorite	CIO-
iodate	IO <sub>3</sub> <sup>-</sup>
manganate	$MnO_4^{2-}$
nitrate	$NO_3^-$
nitrite	NO <sub>2</sub> -
oxalate	$C_2O_4^{2-}$
perchlorate	CIO <sub>4</sub> <sup>-</sup>
permanganate	MnO <sub>4</sub>
peroxide	O <sub>2</sub> <sup>2-</sup>
phosphate	PO <sub>4</sub> 3-
phosphite	PO <sub>3</sub> <sup>3</sup> -
silicate	SiO <sub>3</sub> <sup>2</sup>
sulfate	SO <sub>4</sub> <sup>2</sup>
sulfite	SO <sub>3</sub> <sup>2</sup>
tartrate	C <sub>4</sub> H <sub>4</sub> O <sub>6</sub> <sup>2-</sup>
thiocyanate	SCN <sup>-</sup>
thiosulfate	$S_2O_3^{2-}$
	22-0

$AsO_3^{3-}$	arsenite
AsO <sub>4</sub> <sup>3-</sup>	arsenate
$BO_3^{3-}$	borate
BrO <sub>3</sub>	bromate
$C_2H_3O_2^-$	acetate
$C_2O_4^{2-}$	oxalate
C <sub>4</sub> H <sub>4</sub> O <sub>6</sub> <sup>2-</sup>	tartrate
$C_7H_5O_2^-$	benzoate
CIO-	hypochlorite
CIO <sub>2</sub>	chlorite
CIO <sub>3</sub> <sup>-</sup>	chlorate
CIO <sub>4</sub> <sup>-</sup>	perchlorate
CN <sup>-</sup>	cyanide
$CO_3^{2-}$	carbonate
$Cr_2O_7^{2-}$	dichromate
CrO <sub>4</sub> <sup>2</sup> -	chromate
$H_2PO_3^-$	dihydrogen phosphite
$H_2PO_4^-$	dihydrogen phosphate
HCO <sub>3</sub> <sup>-</sup>	hydrogen carbonate
HPO <sub>3</sub> <sup>2</sup>	hydrogen phosphite
HPO <sub>4</sub> <sup>2</sup>	hydrogen phosphate
HS <sup>-</sup>	hydrogen sulfide
HSO <sub>3</sub> ⁻	hydrogen sulfite
HSO <sub>4</sub> <sup>-</sup>	hydrogen sulfate
IO <sub>3</sub>	iodate
$MnO_4^-$	permanganate
$MnO_4^{2-}$	manganate
$N_3^-$	azide
$NH_4^+$	ammonium
$NO_2^-$	nitrite
NO <sub>3</sub> <sup>-</sup>	nitrate
$O_2^2$	peroxide
OH-	hydroxide
PO <sub>3</sub> <sup>3</sup> -	phosphite
PO <sub>4</sub> <sup>3-</sup>	phosphate
$S_2O_3^2$	thiosulfate
SCN <sup>-</sup>	thiocyanate
SiO <sub>3</sub> <sup>2</sup> -	silicate
SO <sub>3</sub> <sup>2</sup> -	sulfite
SO <sub>4</sub> <sup>2-</sup>	sulfate