THE "I CAN'T WAIT TO MEMORIZE ALL OF THESE ELEMENTS" LIST

Aluminum	**Al**	Germanium	**Ge**	Polonium	**Po**
Antimony	**Sb**	Gold	**Au**	Potassium	**K**
Argon	**Ar**	Helium	**He**	Radium	**Ra**
Arsenic	**As**	Hydrogen	**H**	Radon	**Rn**
Barium	**Ba**	Iodine	**I**	Rubidium	**Rb**
Beryllium	**Be**	Iron	**Fe**	Scandium	**Sc**
Bismuth	**Bi**	Krypton	**Kr**	Selenium	**Se**
Boron	**B**	Lead	**Pb**	Silicon	**Si**
Bromine	**Br**	Lithium	**Li**	Silver	**Ag**
Cadmium	**Cd**	Magnesium	**Mg**	Sodium	**Na**
Calcium	**Ca**	Manganese	**Mn**	Strontium	**Sr**
Carbon	**C**	Mercury	**Hg**	Sulfur	**S**
Cesium	**Cs**	Neon	**Ne**	Thallium	**Tl**
Chlorine	**Cl**	Nickel	**Ni**	Tin	**Sn**
Chromium	**Cr**	Nitrogen	**N**	Titanium	**Ti**
Cobalt	**Co**	Oxygen	**O**	Tungsten	**W**
Copper	**Cu**	Phosphorus	**P**	Uranium	**U**
Fluorine	**F**	Platinum	**Pt**	Xenon	**Xe**
Gallium	**Ga**	Plutonium	**Pu**	Zinc	**Zn**

COMMON POLYIONS TO REMEMBER (Make flashcards! This is required!
1. Put the name of the ion on one side
2. Write the formula on the other side)

1^+ CHARGE	
FORMULA	NAME
NH_4^+	ammonium
2^- CHARGE	
FORMULA	NAME
SO_4^{2-}	sulfate
SO_3^{2-}	sulfite
CO_3^{2-}	carbonate
CrO_4^{2-}	chromate
$Cr_2O_7^{2-}$	dichromate
HPO_4^{2-}	hydrogen phosphate OR biphosphate
HPO_3^{2-}	hydrogen phosphite OR biphosphite
$C_2O_4^{2-}$	oxalate
3^- CHARGE	
FORMULA	NAME
PO_4^{3-}	phosphate
PO_3^{3-}	phosphite

1- CHARGE	
FORMULA	NAME
OH^-	hydroxide
CN^-	cyanide
SCN^-	thiocyanate
MnO_4^-	permanganate
ClO_4^-	perchlorate (+ Br, I)
ClO_3^-	chlorate (+ Br, I)
ClO_2^-	chlorite (+ Br, I)
ClO^-	hypochlorite (+ Br, I)
NO_3^-	nitrate
NO_2^-	nitrite
CH_3COO^-	acetate
$H_2PO_4^-$	dihydrogenphosphate
HCO_3^-	hydrogen carbonate OR bicarbonate

*Use the group number of the element to determine monatomic ions. Ex: Sodium is in group 1. It forms Na^+. Calcium is group 2. It forms Ca^{2+}.

Family 7 series (halogens): prefixes and suffixes used to indicate the relative amounts of oxygen

Substitute group 7 elements (Cl, Br, I)

	prefix	**halogen**	**suffix**
most oxygen	per	.....	ate
	.....	.....	ate
	.....	.....	ite
least oxygen	hypo	.....	ite

Examples: ClO_4^- is perchlorate, BrO_3^- is bromate, IO_2^- is iodite, IO^- is hypoiodite (fluorine, a halogen of course, is not included in this naming scheme because it does not commonly form these type of molecules due to its strong electronegativity.