

# Ion Reference Sheet

(+1 and -1 charges)

$K^{+1}$	potassium
$Ag^{+1}$	silver
$Na^{+1}$	sodium
$NH_4^{+1}$	ammonium
$Cu^{+1}$	copper (I)
$H^{+1}$	hydrogen
$H_3O^{+1}$	hydronium
$Li^{+1}$	lithium
$C_2H_3O_2^{-1}$	} acetate
$CH_3COO^{-1}$	
$Br^{-1}$	bromide
$ClO_3^{-1}$	chlorate
$ClO^{-1}$	hypochlorite
$Cl^{-1}$	chloride
$F^{-1}$	fluoride
$HCO_3^{-1}$	bicarbonate
	or hydrogen carbonate
$OH^{-1}$	hydroxide
$I^{-1}$	iodide
$NO_3^{-1}$	nitrate
$NO_2^{-1}$	nitrite
$MnO_4^{-1}$	permanganate
$ClO_2^{-}$	chlorite
$H^{-1}$	hydride
$ClO_4^{-1}$	perchlorate
$H_2PO_4^{-1}$	dihydrogen phosphate
$HSO_4^{-1}$	bisulfate or
	hydrogen sulfate
$HSO_3^{-1}$	bisulfite or
	hydrogen sulfite
$HS^{-1}$	bisulfide or
	hydrogen sulfide

(+2, -2, +3, -3, and +4 charges)

$Ba^{2+}$	barium
$Ca^{2+}$	calcium
$Cd^{2+}$	cadmium
$Cu^{2+}$	copper (II)
$Fe^{2+}$	iron (II)
$Pb^{2+}$	lead (II)
$Mg^{2+}$	magnesium
$Sr^{2+}$	strontium
$Zn^{2+}$	zinc
$Hg_2^{2+}$	mercury (I)
$Hg^{2+}$	mercury (II)
$Cr^{2+}$	chromium (II)
$Co^{2+}$	cobalt (II)
$Ni^{2+}$	nickel (II)
$Sn^{2+}$	tin(II)
$CO_3^{2-}$	carbonate
$CrO_4^{2-}$	chromate
$Cr_2O_7^{2-}$	dichromate
$O^{2-}$	oxide
$SO_4^{2-}$	sulfate
$S^{2-}$	sulfide
$SO_3^{2-}$	sulfite
$C_2O_4^{2-}$	oxalate
$HPO_4^{2-}$	monohydrogen phosphate
$Cr^{3+}$	chromium(III)
$Co^{3+}$	cobalt(III)
$Sc^{3+}$	scandium
$Al^{3+}$	aluminum
$Fe^{3+}$	iron (III)
$N^{3-}$	nitride
$PO_4^{3-}$	phosphate
$P^{3-}$	phosphide
$Sn^{4+}$	tin (IV)
$Pb^{4+}$	lead (IV)

Extras

(for reference only)  
These will not appear on the quiz

$Au^{+1}$	gold (I)
$BrO_3^{-1}$	bromate
$CN^{-1}$	cyanide
$IO_3^{-1}$	iodate
$SCN^{-1}$	thiocyanate
$O_2^{2-}$	peroxide
$S_2O_3^{2-}$	thiosulfate
$S_2O_2^{2-}$	thiosulfite
$Mn^{2+}$	manganese (II)
$Au^{3+}$	gold(III)
$Ni^{3+}$	nickel(III)
$AsO_4^{3-}$	arsenate
$As^{3-}$	arsenide
$AsO_3^{3-}$	arsenite

NOTES:

*-Ions ending in -ate have one MORE oxygen atom than ions ending in -ite.*

*-The Periodic Table can be used to easily reference many single-element ions*

*Element names and symbols you need to know:*

*Atomic Numbers:*

*1-38, 46-48, 50, 51, 53-56, 74, 78-80, 82, 83, and 92*