Common Ions and Their Charges

Monatomic Cations	Name
H^+	hydrogen
Li^+	lithium
Na^+	sodium
K^+	potassium
Rb^+	rubidium
Cs^+	cesium
Be^{2+}	beryllium
Mg^{2+}	magnesium
Ca^{2+}	calcium
Sr^{2+}	strontium
Ba^{2+}	barium
Al^{3+}	aluminum
Ga^{3+}	gallium
In^{3+}	indium
Ag^+	silver (*memorize*)
Zn^{2+}	zinc (*memorize*)

Monatomic Anions	Name
F^-	fluoride
Cl^-	chloride
Br^-	bromide
I^-	iodide
O^{2-}	oxide
S^{2-}	sulfide
Se^{2-}	selenide
Te^{2-}	telluride
N^{3-}	nitride
P^{3-}	phosphide
As^{3-}	arsenide

Monatomic Cations (multiple oxidation state)	Name (Roman numeral gives the positive charge!)
Fe^{3+}	iron(III)
Fe^{2+}	iron(II)
Cu^{2+}	copper(II)
Cu^+	copper(I)
Cr^{3+}	chromium(III)
Ni^{2+}	nickel(II)
Pb^{4+}	lead(IV)
Pb^{2+}	lead(II)
Hg^{2+}	mercury(II)

Polyatomic Ions To memorize	Name
NH_4^+	ammonium
NO_2^-	nitrite
NO_3^-	nitrate
SO_3^{2-}	sulfite
SO_4^{2-}	sulfate
OH^-	hydroxide
PO_4^{3-}	phosphate
CO_3^{2-}	carbonate
ClO_3^-	chlorate
$C_2H_3O_2^-$	acetate

PERIODIC TABLE OF IONS

TABLE OF POLYATOMIC IONS

acetate	CH_3COO^-	dihydrogen phosphate	$H_2PO_4^-$	oxalate	$C_2O_4^{2-}$
arsenate	AsO_4^{3-}	hydrogen carbonate	HCO_3^-	perchlorate	ClO_4^-
arsenite	AsO_3^{3-}	hydrogen oxalate	$HC_2O_4^-$	periodate	IO_4^-
benzoate	$C_6H_5COO^-$	hydrogen sulfate	HSO_4^-	permanganate	MnO_4^-
borate	BO_3^{3-}	hydrogen sulfide	HS^-	peroxide	O_2^{2-}
bromate	BrO_3^-	hydrogen sulfite	HSO_3^-	phosphate	PO_4^{3-}
carbonate	CO_3^{2-}	hydroxide	OH^-	pyrophosphate	$P_2O_7^{4-}$
chlorate	ClO_3^-	hypochlorite	ClO^-	sulfate	SO_4^{2-}
chloride	Cl^-	iodate	IO_3^-	sulfite	SO_3^{2-}
chlorite	ClO_2^-	monohydrogen phosphate	HPO_4^{2-}	thiocyanate	SCN^-
chromate	CrO_4^{2-}	nitrate	NO_3^-	thiosulfate	$S_2O_3^{2-}$
cyanate	CNO^-	nitrite	NO_2^-	**POSITIVE POLYATOMIC IONS**	
cyanide	CN^-	orthosilicate	SiO_4^{4-}	ammonium	NH_4^+
dichromate	$Cr_2O_7^{2-}$			hydronium	H_3O^+

KEY: atomic number; symbol; ion charge; ion name (IUPAC). Example: 26 Fe^{3+} iron (III); Fe^{2+} iron (II)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 H^+ hydrogen																1 H^- hydride	2 He helium
3 Li^+ lithium	4 Be^{2+} beryllium											5 B boron	6 C carbon	7 N^{3-} nitride	8 O^{2-} oxide	9 F^- fluoride	10 Ne neon
11 Na^+ sodium	12 Mg^{2+} magnesium											13 Al^{3+} aluminum	14 Si silicon	15 P^{3-} phosphide	16 S^{2-} sulfiide	17 Cl^- chloride	18 Ar argon
19 K^+ potassium	20 Ca^{2+} calcium	21 Sc^{3+} scandium	22 Ti^{4+} titanium (IV); Ti^{3+} titanium (III)	23 V^{3+} vanadium(III); V^{5+} vanadium (V)	24 Cr^{3+} chromium (III); Cr^{2+} chromium (II)	25 Mn^{2+} manganese(II); Mn^{4+} manganese(IV)	26 Fe^{3+} iron (III); Fe^{2+} iron (II)	27 Co^{2+} cobalt (II); Co^{3+} cobalt (III)	28 Ni^{2+} nickel (II); Ni^{3+} nickel (III)	29 Cu^{2+} copper (II); Cu^+ copper (I)	30 Zn^{2+} zinc	31 Ga^{3+} gallium	32 Ge^{4+} germanium	33 As^{3-} arsenide	34 Se^{2-} selenide	35 Br^- bromide	36 Kr krypton
37 Rb^+ rubidium	38 Sr^{2+} strontium	39 Y^{3+} yttrium	40 Zr^{4+} zirconium	41 Nb^{5+} niobium (V); Nb^{3+} niobium(III)	42 Mo^{6+} molybdenum	43 Tc^{7+} technetium	44 Ru^{3+} ruthenium(III); Ru^{4+} ruthenium(IV)	45 Rh^{3+} rhodium	46 Pd^{2+} paladium(II); Pd^{4+} paladium(IV)	47 Ag^+ silver	48 Cd^{2+} cadmium	49 In^{3+} indium	50 Sn^{4+} tin (IV); Sn^{2+} tin (II)	51 Sb^{3+} antimony(III); Sb^{5+} antimony(V)	52 Te^{2-} telluride	53 I^- iodide	54 Xe xenon
55 Cs^+ cesium	56 Ba^{2+} barium	57 La^{3+} lanthanum	72 Hf^{4+} hafnium	73 Ta^{5+} tantalum	74 W^{6+} tungsten	75 Re^{7+} rhenium	76 Os^{4+} osmium	77 Ir^{4+} iridium	78 Pt^{4+} platinum(IV); Pt^{2+} platinum(II)	79 Au^{3+} gold (III); Au^+ gold (I)	80 Hg^{2+} mercury (II); Hg^+ mercury (I)	81 Tl^+ thallium (I); Tl^{3+} thallium(III)	82 Pb^{2+} lead (II); Pb^{4+} lead (IV)	83 Bi^{3+} bismuth(III); Bi^{5+} bismuth(V)	84 Po^{2+} polonium(II); Po^{4+} polonium(IV)	85 At^- astatide	86 Ra radon
87 Fr^+ francium	88 Ra^{2+} radius	89 Ac^{3+} actinium															

58 Ce^{3+} cerium	59 Pr^{3+} praseodymium	60 Nd^{3+} neodymium	61 Pm^{3+} promethium	62 Sm^{3+} samarium(III); Sm^{2+} samarium(II)	63 Eu^{3+} europium (III); Eu^{2+} europium (II)	64 Gd^{3+} gadolinium	65 Tb^{3+} terbium	66 Dy^{3+} dysprosium	67 Ho^{3+} holmium	68 Er^{3+} erbium	69 Tm^{3+} thulium	70 Yb^{3+} ytterbium(III); Yb^{3+} ytterbium(II)	71 Lu^{3+} lutetium
90 Th^{4+} thorium	91 Pa^{5+} protactinium(V); Pa^{4+} protactinium(IV)	92 U^{6+} uranium (VI); U^{4+} uranium (IV)	93 Np^{5+} neptunium	94 Pu^{4+} plutonium(IV); Pu^{6+} plutonium(VI)	95 Am^{3+} americium(III); Am^{4+} americium(IV)	96 Cm^{3+} curium	97 Bk^{3+} berkelium(III); Bk^{4+} berkelium(IV)	98 Cf^{3+} californium	99 Es^{3+} einsteinium	100 Fm^{3+} fermium	101 Md^{2+} mendelevium (II); Md^{3+} mendelevium (III)	102 No^{2+} nobelium(II); No^{3+} nobelium(III)	103 Lr^{3+} lawrencium