



TABLE OF POLYATOMIC IONS	
acetate	$\text{CH}_3\text{COO}^-$
arsenate	$\text{AsO}_4^{3-}$
arsenite	$\text{AsO}_3^{3-}$
benzoate	$\text{C}_6\text{H}_5\text{COO}^-$
borate	$\text{BO}_3^{3-}$
bromate	$\text{BrO}_3^-$
carbonate	$\text{CO}_3^{2-}$
chlorate	$\text{ClO}_3^-$
chlorite	$\text{ClO}_2^-$
chromate	$\text{CrO}_4^{2-}$
cyanate	$\text{CNO}^-$
cyanide	$\text{CN}^-$
dichromate	$\text{Cr}_2\text{O}_7^{2-}$
dihydrogen phosphate	$\text{H}_2\text{PO}_4^-$
hydrogen carbonate	$\text{HCO}_3^-$
hydrogen oxalate	$\text{HC}_2\text{O}_4^-$
hydrogen sulfate	$\text{HSO}_4^-$
hydrogen sulfide	$\text{HS}^-$
hydrogen sulfite	$\text{HSO}_3^-$
hydroxide	$\text{OH}^-$
hypochlorite	$\text{ClO}^-$
iodate	$\text{IO}_3^-$
monohydrogen phosphate	$\text{HPO}_4^{2-}$
nitrate	$\text{NO}_3^-$
nitrite	$\text{NO}_2^-$
orthosilicate	$\text{SiO}_4^{4-}$
oxalate	$\text{C}_2\text{O}_4^{2-}$
perchlorate	$\text{ClO}_4^-$
periodate	$\text{IO}_4^-$
permanganate	$\text{MnO}_4^-$
peroxide	$\text{O}_2^{2-}$
phosphate	$\text{PO}_4^{3-}$
pyrophosphate	$\text{P}_2\text{O}_7^{4-}$
sulfate	$\text{SO}_4^{2-}$
sulfite	$\text{SO}_3^{2-}$
thiocyanate	$\text{SCN}^-$
thiosulfate	$\text{S}_2\text{O}_3^{2-}$
POSITIVE POLYATOMIC IONS	
ammonium	$\text{NH}_4^+$
hydronium	$\text{H}_3\text{O}^+$

## PERIODIC TABLE

KEY	
atomic number	26
ion charge	$\text{Fe}^{3+}$
ion name (IUPAC)	iron (III)
symbol	$\text{Fe}^{2+}$
	iron (II)

1	2											17	18					
1	$\text{H}^+$ hydrogen														17	18		
3	4																	
3	$\text{Li}^+$ lithium	4	$\text{Be}^{2+}$ beryllium															
11	12																	
11	$\text{Na}^+$ sodium	12	$\text{Mg}^{2+}$ magnesium	3	4	5	6	7	8	9	10	11	12					
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
	$\text{K}^+$ potassium	$\text{Ca}^{2+}$ calcium	$\text{Sc}^{3+}$ scandium	$\text{Ti}^{4+}$ titanium (IV)	$\text{V}^{3+}$ vanadium (III)	$\text{Cr}^{3+}$ chromium (III)	$\text{Mn}^{2+}$ manganese (II)	$\text{Fe}^{3+}$ iron (III)	$\text{Co}^{2+}$ cobalt (II)	$\text{Ni}^{2+}$ nickel (II)	$\text{Cu}^{2+}$ copper (II)	$\text{Zn}^{2+}$ zinc	$\text{Ga}^{3+}$ gallium	$\text{Ge}^{4+}$ germanium	$\text{As}^{3-}$ arsenide	$\text{Se}^{2-}$ selenide	$\text{Br}^-$ bromide	$\text{Kr}$ krypton
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	
	$\text{Rb}^+$ rubidium	$\text{Sr}^{2+}$ strontium	$\text{Y}^{3+}$ yttrium	$\text{Zr}^{4+}$ zirconium	$\text{Nb}^{5+}$ niobium (V)	$\text{Mo}^{6+}$ molybdenum	$\text{Tc}^{7+}$ technetium	$\text{Ru}^{3+}$ ruthenium (III)	$\text{Rh}^{3+}$ rhodium	$\text{Pd}^{2+}$ palladium (II)	$\text{Ag}^+$ silver	$\text{Cd}^{2+}$ cadmium	$\text{In}^{3+}$ indium	$\text{Sn}^{4+}$ tin (IV)	$\text{Sb}^{3+}$ antimony (III)	$\text{Te}^{2-}$ telluride	$\text{I}^-$ iodide	$\text{Xe}$ xenon
55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	
	$\text{Cs}^+$ cesium	$\text{Ba}^{2+}$ barium	$\text{La}^{3+}$ lanthanum	$\text{Hf}^{4+}$ hafnium	$\text{Ta}^{5+}$ tantalum	$\text{W}^{6+}$ tungsten	$\text{Re}^{7+}$ rhenium	$\text{Os}^{4+}$ osmium	$\text{Ir}^{4+}$ iridium	$\text{Pt}^{4+}$ platinum (IV)	$\text{Au}^{3+}$ gold (III)	$\text{Hg}^{2+}$ mercury (II)	$\text{Tl}^+$ thallium (I)	$\text{Pb}^{2+}$ lead (II)	$\text{Bi}^{3+}$ bismuth (III)	$\text{Po}^{2+}$ polonium (II)	$\text{At}^-$ astatide	$\text{Rn}$ radon
87	88	89																
87	$\text{Fr}^+$ francium	$\text{Ra}^{2+}$ radium	$\text{Ac}^{3+}$ actinium	58	59	60	61	62	63	64	65	66	67	68	69	70	71	
				$\text{Ce}^{3+}$ cerium	$\text{Pr}^{3+}$ praseodymium	$\text{Nd}^{3+}$ neodymium	$\text{Pm}^{3+}$ promethium	$\text{Sm}^{3+}$ samarium (III)	$\text{Eu}^{3+}$ europium (III)	$\text{Gd}^{3+}$ gadolinium	$\text{Tb}^{3+}$ terbium	$\text{Dy}^{3+}$ dysprosium	$\text{Ho}^{3+}$ holmium	$\text{Er}^{3+}$ erbium	$\text{Tm}^{3+}$ thulium	$\text{Yb}^{3+}$ ytterbium (III)	$\text{Lu}^{3+}$ lutetium	
								$\text{Sm}^{2+}$ samarium (II)	$\text{Eu}^{2+}$ europium (II)									
				90	91	92	93	94	95	96	97	98	99	100	101	102	103	
				$\text{Th}^{4+}$ thorium	$\text{Pa}^{5+}$ protactinium (V)	$\text{U}^{6+}$ uranium (VI)	$\text{Np}^{5+}$ neptunium	$\text{Pu}^{4+}$ plutonium (IV)	$\text{Am}^{3+}$ americium (III)	$\text{Cm}^{3+}$ curium	$\text{Bk}^{3+}$ berkelium (III)	$\text{Cf}^{3+}$ californium	$\text{Es}^{3+}$ einsteinium	$\text{Fm}^{3+}$ fermium	$\text{Md}^{2+}$ mendelevium (II)	$\text{No}^{2+}$ nobelium (II)	$\text{Lr}^{3+}$ lawrencium	
								$\text{Pu}^{6+}$ plutonium (VI)	$\text{Am}^{4+}$ americium (IV)		$\text{Bk}^{4+}$ berkelium (IV)				$\text{Md}^{3+}$ mendelevium (III)	$\text{No}^{3+}$ nobelium (III)		