

For monatomic ions see p 67,98,99 of the text

(Chemistry: A Molecular Approach, 4th ed., N. J. Tro 2017).

You must know the names, formulas, spellings of all of these polyatomic anions.

The red ones are especially important and serve as a basis for other related ions.

"Hydrogen" anions (HPO_4^{2-} , HCO_3^- , etc.) follow a systematic pattern of naming and charges derived by adding H^+ to the base anion from the table below.

CO_3^{2-} carbonate	NO_2^- nitrite NO_3^- nitrate		
	PO_3^{3-} phosphite PO_4^{3-} phosphate	SO_3^{2-} sulfite SO_4^{2-} sulfate	ClO^- hypochlorite ClO_2^- chlorite ClO_3^- chlorate ClO_4^- perchlorate
	AsO_3^{3-} arsenite AsO_4^{3-} arsenate	SeO_3^{2-} selenite SeO_4^{2-} selenate	BrO^- hypobromite BrO_2^- bromite BrO_3^- bromate BrO_4^- perbromate
			IO^- hypoiodite IO_2^- iodite IO_3^- iodate IO_4^- periodate
OH^- hydroxide	CN^- cyanide	$\text{Cr}_2\text{O}_7^{2-}$ dichromate	NH_4^+ ammonium
SH^- hydrogen sulfide	SCN^- thiocyanate	MnO_4^- permanganate	Hg_2^{2+} mercurous or mercury(I)
		CH_3COO^- acetate	