

Polyatomic Ions with "-ite" Ending

In the previous unit you learned six polyatomic ions with the "-ate" ending. Certain of these have counterparts with the "-ite" ending. The only difference in the formula for those with "-ite" endings is in having one less oxygen. The charge is unchanged. For example, *nitrate* is NO_3^- and *nitrite* is NO_2^- . Below are the ones with which you should become familiar.

NO_3^-	SO_4^{2-}	PO_4^{3-}
NO_2^-	SO_3^{2-}	PO_3^{3-}

ClO_3^- chlorate
ClO_2^- chlorite

Nomenclature of "-ate" and "-ite" Compounds

In this unit you are going to practice working with compounds of ions ending with "-ate" and "-ite". All the rules you had previously learned still apply here.

Drill I - 5: Nomenclature of "-ate" and "-ite" ions and compounds

FORMULA	NAME
SO_4^{2-}	
SO_3^{2-}	
	nitrite
	phosphate
	acetate
	chlorite
Na_3PO_4	
K_2SO_3	
$\text{Pb}(\text{OH})_2$	
CoClO_2	
$\text{Ca}(\text{NO}_3)_2$	
	iron(III) carbonate
	copper(I) sulfite
	cesium nitrite
	aluminum chlorate

To check your answers, note that you are at **Drill I-5**

ANSWERS TO Drill I - 5: Nomenclature of "- ate" and "- ite" Ions and Compounds

FORMULA	NAME
SO_4^{2-}	<i>sulfate</i>
SO_3^{2-}	<i>sulfite</i>
NO_2^-	nitrite
PO_3^{3-}	phosphite
$\text{C}_2\text{H}_3\text{O}_2^-$	acetate
ClO_2^-	chlorite
Na_3PO_4	<i>sodium phosphate</i>
K_2SO_3	<i>potassium sulfite</i>
$\text{Pb}(\text{OH})_2$	<i>lead(II) hydroxide</i>
CoClO_2	<i>cobalt(I) chlorite</i>
$\text{Ca}(\text{NO}_3)_2$	<i>calcium nitrate</i>
$\text{Fe}_2(\text{CO}_3)_3$	iron(III) carbonate
Cu_2SO_3	copper(I) sulfite
CsNO_2	cesium nitrite
$\text{Al}(\text{ClO}_3)_3$	aluminum chlorate