

## 4.3 • Reaction in Aqueous Solution

## ANSWERS to NAMING ACIDS

“ate” becomes “\_\_\_\_\_ic acid”

“ite” becomes “\_\_\_\_\_ous acid”

“ide” becomes “hydro\_\_\_\_\_ic acid

in sulfur compounds, add “ur”

in phosphorus compounds, add “or”

bromate	$\text{BrO}_3^-$	$\text{HBrO}_3$	bromic acid	perchlorate	$\text{ClO}_4^-$	$\text{HClO}_4$	perchloric acid
periodate	$\text{IO}_4^-$	$\text{HIO}_4$	periodic acid	bisulfate*	$\text{HSO}_4^-$	$\text{H}_2\text{SO}_4$	sulfuric acid
carbonate	$\text{CO}_3^{2-}$	$\text{H}_2\text{CO}_3$	carbonic acid	hypoiodite	$\text{IO}^-$	$\text{HIO}$	hypoiodous acid
peroxide*	$\text{O}_2^{2-}$	$\text{H}_2\text{O}_2$	hydrogen peroxide	bicarbonate*	$\text{HCO}_3^-$	$\text{H}_2\text{CO}_3$	carbonic acid
chloride	$\text{Cl}^-$	$\text{HCl}$	hydrochloric acid	sulfate	$\text{SO}_4^{2-}$	$\text{H}_2\text{SO}_4$	sulfuric acid
chlorite	$\text{ClO}_2^-$	$\text{HClO}_2$	chlorous acid	iodite	$\text{IO}_2^-$	$\text{HIO}_2$	iodous acid
thiosulfate	$\text{S}_2\text{O}_3^{2-}$	$\text{H}_2\text{S}_2\text{O}_3$	thiosulfuric acid	acetate	$\text{C}_2\text{H}_3\text{O}_2^-$	$\text{HC}_2\text{H}_3\text{O}_2$	acetic acid
sulfide	$\text{S}^{2-}$	$\text{H}_2\text{S}$	hydrosulfuric acid	iodide	$\text{I}^-$	$\text{HI}$	hydroiodic acid
dichromate	$\text{Cr}_2\text{O}_7^{2-}$	$\text{H}_2\text{Cr}_2\text{O}_7$	dichromic acid	bromide	$\text{Br}^-$	$\text{HBr}$	hydrobromic acid
hypobromite	$\text{BrO}_2^-$	$\text{HBrO}_2$	hypobromous acid	hydroxide*	$\text{OH}^-$	$\text{HOH}$	water
sulfite	$\text{SO}_3^{2-}$	$\text{H}_2\text{SO}_3$	sulfurous acid	phosphate	$\text{PO}_4^{3-}$	$\text{H}_3\text{PO}_4$	phosphoric acid
chromate	$\text{CrO}_4^{2-}$	$\text{H}_2\text{CrO}_4$	chromic acid	hypochlorite	$\text{ClO}^-$	$\text{HClO}$	hypochlorous acid
permanganate	$\text{MnO}_4^-$	$\text{HMnO}_4$	permanganic acid	phosphite	$\text{PO}_3^{3-}$	$\text{H}_3\text{PO}_3$	phosphorous acid
iodate	$\text{IO}_3^-$	$\text{HIO}_3$	iodic acid	oxide*	$\text{O}^{2-}$	$\text{H}_2\text{O}$	water
perbromate	$\text{BrO}_4^-$	$\text{HBrO}_4$	perbromic acid	fluoride	$\text{F}^-$	$\text{HF}$	hydrofluoric acid
cyanide	$\text{CN}^-$	$\text{HCN}$	hydrocyanic acid	thiocyanate	$\text{SCN}^-$	$\text{HSCN}$	thiocyanic acid
chlorate	$\text{ClO}_3^-$	$\text{HClO}_3$	chloric acid	bromite	$\text{BrO}_2^-$	$\text{HBrO}_2$	bromous acid
nitrate	$\text{NO}_3^-$	$\text{HNO}_3$	nitric acid	nitrite	$\text{NO}_2^-$	$\text{HNO}_2$	nitrous acid

\* = be careful