

# IONS AND RADICALS

## Negative ions/radicals

NAME	CHEMICAL FORMULA
Chloride	$\text{Cl}^-$
Bromide	$\text{Br}^-$
Iodide	$\text{I}^-$
Hydroxide	$\text{OH}^-$
Hydrogen carbonate/bicarbonate	$\text{HCO}_3^-$
Hydrogen sulphite/bi sulphite	$\text{HSO}_3^-$
Hydrogen sulphate/ bi sulphate	$\text{HSO}_4^-$
Nitrite	$\text{NO}_2^-$
Nitrate	$\text{NO}_3^-$
Carbonate	$\text{CO}_3^{2-}$
Sulphite	$\text{SO}_3^{2-}$
Sulphate	$\text{SO}_4^{2-}$
Sulphide	$\text{S}^{2-}$
Oxide	$\text{O}^{2-}$
Zincate	$\text{ZnO}_2^{2-}$
Plumbate	$\text{PbO}_2^{2-}$
Dichromate	$\text{Cr}_2\text{O}_7^{2-}$
Nitride	$\text{N}^{3-}$
Phosphate	$\text{PO}_4^{3-}$
carbide	$\text{C}^{4-}$

## Positive ions/radicals (for elements with $Z > 20$ )

NAME	CHEMICAL FORMULA
Copper(I)/Cuperous	$\text{Cu}^+$
Copper (II) / Cuperic	$\text{Cu}^{2+}$
Mercury(I)/Mercurous	$\text{Hg}^+$
Mercury (II) / Mercuric	$\text{Hg}^{2+}$
Silver(I)/Argentous	$\text{Ag}^+$
Silver (II) / Argentic	$\text{Ag}^{2+}$
Ammonium	$\text{NH}_4^+$
Zinc	$\text{Zn}^{2+}$
Iron (II) / ferrous	$\text{Fe}^{2+}$
Iron (III) / ferric	$\text{Fe}^{3+}$
Lead (II) / plumbous	$\text{Pb}^{2+}$
Lead (IV) / plumbic	$\text{Pb}^{4+}$
Nickel	$\text{Ni}^{2+}$
Cobalt	$\text{Co}^{2+}$
Tin (II) / stannous	$\text{Sn}^{2+}$
Tin (III) / stannic	$\text{Sn}^{4+}$

## Some Important compound and their names

try to understand these formulae by looking at above tables

Aluminium sulphate  $Al_2(SO_4)_3$

Barium sulphate  $BaSO_4$

Aluminium chloride  $AlCl_3$

Barium chloride  $BaCl_2$

Ferrous sulphate  $FeSO_4$

Ferric oxide  $Fe_2O_3$

Carbon Carbonate  $CaCO_3$

Lead nitrate  $Pb(NO_3)_2$

Lead Oxide  $PbO$

Silver Bromide  $AgBr$

Silver chloride  $AgCl$

Copper sulphate  $CuSO_4$

Zinc sulphate  $ZnSO_4$

Sodium sulphate  $Na_2SO_4$

Silver nitrate  $AgNO_3$