

Use with textbook pages 186-196.

Chemical names and formulas of ionic compounds

1. Write the name for each of the following compounds.

(a) BeS
beryllium sulfide(b) Hg_3N_2
mercury (II) nitride(c) $\text{Cu}(\text{NO}_3)_2$
copper (II) nitrate(d) Ag_2O
silver oxide(e) CoBr_2
cobalt (II) bromide(f) $\text{Bi}_3(\text{PO}_4)_5$
bismuth (V) phosphate(g) CaF_2
calcium fluoride(h) Mn_2O_3
manganese (III) oxide(i) $\text{Cr}_2(\text{SO}_4)_3$
chromium (III) sulfate(j) ZnCl_2
zinc chloride(k) $\text{Ni}(\text{OH})_2$
nickel (II) hydroxide(l) $\text{K}_2\text{Cr}_2\text{O}_7$
potassium dichromate(m) ScF_3
scandium fluoride(n) NaI
sodium iodide(o) $\text{Pb}(\text{CO}_3)_2$
lead (IV) carbonate(p) RbClO_2
rubidium chlorite(q) K_3P
potassium phosphide(r) $\text{Mg}(\text{CN})_2$
magnesium cyanide(s) SnS
tin (II) sulfide(t) NaHCO_3
sodium bicarbonate

2. Write the chemical formula for each of the following compounds.

(a) aluminum bromide AlBr_3 (b) platinum(II) sulphide PtS (c) strontium sulfite SrSO_3 (d) scandium oxide Sc_2O_3 (e) titanium(IV) nitrite $\text{Ti}(\text{NO}_2)_4$ (f) ammonium sulphate $(\text{NH}_4)_2\text{SO}_4$ (g) lithium selenide Li_2Se (h) lead(II) hydrogen sulphate $\text{Pb}(\text{HSO}_4)_2$ (i) sodium acetate NaCH_3COO (j) cesium chloride CsCl (k) cadmium(II) hydroxide $\text{Cd}(\text{OH})_2$ (l) zinc phosphate $\text{Zn}_3(\text{PO}_4)_2$ (m) barium chloride BaCl_2 (n) tin(II) permanganate $\text{Sn}(\text{MnO}_4)_2$ (o) lithium hypochlorite LiClO (p) gold(III) sulphate $\text{Au}_2(\text{SO}_4)_3$ (q) sodium nitrate NaNO_3 (r) chromium(III) chloride CrCl_3 (s) potassium carbonate K_2CO_3 (t) iron(III) bisulphate $\text{Fe}(\text{HSO}_4)_3$

Use with textbook pages 193-197.

Chemical names and formulas of covalent compounds

1. What is a covalent compound?

compound between two (or more) non-metals, formed by sharing electrons

2. What type of bond is formed in a covalent compound?

covalent bond

3. What is used in naming covalent compounds?

prefixes

4. Write the chemical formula for each of the following compounds.

(a) silicon dioxide <u>SiO₂</u>	(i) dinitrogen pentoxide <u>N₂O₅</u>
(b) chlorine dioxide <u>ClO₂</u>	(j) dinitrogen monoxide <u>N₂O</u>
(c) tellurium dioxide <u>TeO₂</u>	(k) arsenic tetrabromide <u>AsBr₄</u>
(d) selenium trioxide <u>SeO₃</u>	(l) arsenic pentachloride <u>AsCl₅</u>
(e) carbon disulphide <u>CS₂</u>	(m) disulphide pentoxide <u>S₂O₅</u>
(f) arsenic trichloride <u>AsCl₃</u>	(n) sulphur monochloride <u>SCl</u>
(g) chlorine heptoxide <u>ClO₇</u>	(o) phosphorus trichloride <u>PCl₃</u>
(h) selenium difluoride <u>SeF₂</u>	(p) diphosphorus pentoxide <u>P₂O₅</u>