SNC 2D1

IONIC COMPOUNDS:
Names and Formulas

1. Write the formulas for the following compounds.

a. magnesium oxide MgO

b. aluminum nitride AlN

c. potassium sulfide K_2S

d. calcium bromide $CaBr_2$

e. aluminum sulfide Al_2S_3

f. beryllium oxide BeO

g. strontium phosphide Sr_3P_2

h. sodium fluoride NaF

i. lithium selenide Li_2Se

j. barium oxide BaO

k. tin (II) fluoride SnF_2

l. lead (IV) nitride Pb_3N_4

m. iron (III) chloride $FeCl_3$

n. copper (I) oxide Cu_2O

o. [redacted]

p. mercury (II) oxide HgO

q. tin (IV) iodide SnI_4

r. [redacted]

s. cobalt (II) sulphide CoS

t. tin (IV) sulphide SnS_2

2. Write the names for the following compounds.

a. Li_2O lithium oxide

b. $AlCl_3$ aluminum chloride

c. MgS magnesium sulfide

d. CaF_2 calcium fluoride

e. Al_2O_3 aluminum oxide

f. BeF_2 beryllium fluoride

g. K_3P potassium phosphide

h. Mg_3P_2 magnesium phosphide

i. CaO calcium oxide

j. Ag_2S silver sulfide

k. PbS lead(II) sulfide

l. SnO_2 tin(IV) oxide

m. NiO nickel(II) oxide

n. CuI_2 copper(II) iodide

o. $PbCl_4$ lead(IV) chloride

p. FeP iron(III) phosphide

q. $AuBr_3$ gold(III) bromide

r. Hg_2S mercury(I) sulfide

s. [redacted]

t. MnO_2 manganese(IV) oxide

SNC 2D1

POLYATOMIC COMPOUNDS:
Names and Formulas

3. Write the formulas for the following compounds.

a. magnesium carbonate $MgCO_3$

b. aluminum nitrate $Al(NO_3)_3$

c. potassium sulfate K_2SO_4

d. calcium chlorate $Ca(ClO_3)_2$

e. aluminum sulfate $Al_2(SO_4)_3$

f. sodium carbonate Na_2CO_3

g. strontium phosphate $Sr_3(PO_4)_2$

h. sodium chlorate $NaClO_3$

i. lithium nitrate $LiNO_3$

j. aluminum hydroxide $Al(OH)_3$

k. tin (II) chlorate $Sn(ClO_3)_2$

l. lead (IV) nitrate $Pb(NO_3)_4$

m. iron (III) carbonate $Fe_2(CO_3)_3$

n. copper (II) hydroxide $Cu(OH)_2$

o. lead (II) nitrate $Pb(NO_3)_2$

p. mercury (II) chlorate $Hg(ClO_3)_2$

q. tin (IV) phosphate $Sn_3(PO_4)_4$

r. lead (IV) hydroxide $Pb(OH)_4$

s. potassium nitrate KNO_3

t. tin (IV) sulphate $Sn(SO_4)_2$

4. Write the names for the following compounds.

a. Li_2SO_4 lithium sulfate

b. $Al(ClO_3)_3$ aluminum chlorate

c. $MgSO_4$ magnesium sulfate

d. K_2CO_3 potassium carbonate

e. Na_2SO_4 sodium sulfate

f. $AgNO_3$ silver nitrate

g. K_3PO_4 potassium phosphate

h. $Sr(ClO_3)_2$ strontium chlorate

i. $RbOH$ rubidium hydroxide

j. $HClO_3$ hydrogen chlorate

k. $PbSO_4$ lead(II) sulfate

l. $AuOH$ gold(I) hydroxide

m. $GaPO_4$ gallium(III) phosphate

n. $CuNO_3$ copper(I) nitrate

o. $Pb(ClO_3)_4$ lead(IV) chlorate

p. $Fe(ClO)_3$ iron(III) chlorate

q. Au_2CO_3 gold(I) carbonate

r. $HgOH$ mercury(I) hydroxide

s. $Sb_2(SO_4)_3$ antimony(III) sulfate

t. $MnSO_4$ manganese(II) sulfate

SNC 2DO

MOLECULAR COMPOUNDS:
Names and Formulas

5. Write the formulas for the following compounds.

a. carbon dioxide CO_2

b. silicon dioxide SiO_2

c. water H_2O

d. carbon disulphide CS_2

e. sulphur trioxide SO_3

f. carbon tetrachloride CCl_4

g. sulphur dioxide SO_2

h. dinitrogen tetroxide N_2O_4

i. nitrogen monoxide NO

j. arsenic tribromide $AsBr_3$

k. diphosphorus trisulphide P_2S_3

l. dinitrogen monoxide N_2O

m. dichlorine monoxide Cl_2O

n. bromine gas Br_2

o. carbon monoxide CO

p. xenon tetrafluoride XeF_4

q. neon gas Ne

r. silicon tetrahydride SiH_4

s. iodine heptachloride ICl_7

t. krypton difluoride KrF_2

6. Write the names for the following compounds.

a. CF_4 carbon tetrafluoride

b. NH_3 nitrogen trihydride

c. PBr_3 phosphorus tribromide

d. F_2 gas fluorine gas

e. CS_2 carbon disulfide

f. CO carbon monoxide

g. SiC silicon monocarbide

h. N_2O_4 dinitrogen tetroxide

i. P_2O_5 diphosphorus pentoxide

j. SF_4 sulfur tetrafluoride

k. NF_3 nitrogen trifluoride

l. P_2S_5 diphosphorus pentasulfide

m. PF_5 phosphorus pentafluoride

n. ICl iodine monochloride

o. $SeCl_2$ selenium dichloride

p. Cl_2O dichlorine monoxide

q. $AsBr_3$ arsenic tribromide

r. H_2S dihydrogen monosulfide

s. B_2H_8 diboron octahydride

t. $TeCl_2$ tellurium dichloride

SNC 2DO

PUTTING IT ALL TOGETHER:
Names and Formulas

7. Write the formulas for the following compounds.

a. calcium fluoride CaF_2

b. carbon disulfide CS_2

c. nitrogen triodide NI_3

d. sodium phosphide Na_3P

e. dichlorine monoxide Cl_2O

f. iron (III) carbonate $Fe_2(CO_3)_3$

g. ~~sulphuric~~ acid H_2SO_4

h. diphosphorus pentasulphide P_2S_5

i. tin (IV) chloride $SnCl_4$

j. magnesium chlorate $Mg(ClO_3)_2$

k. potassium sulphate K_2SO_4

l. barium nitride Ba_3N_2

m. aluminum hydroxide $Al(OH)_3$

n. fluorine gas F_2

o. silicon dioxide SiO_2

p. calcium hydroxide $Ca(OH)_2$

q. xenon gas Xe

r. gold (I) nitrate $AuNO_3$

s. sulphur trioxide SO_3

t. ~~nitric~~ acid HNO_3

8. Write the names for the following compounds.

a. CCl_4 carbon tetrachloride

b. $Mg(ClO_3)_2$ magnesium chlorate

c. PBr_3 phosphorus tribromide

d. H_2 gas hydrogen gas

e. PbS_2 lead(IV) sulfide

f. $Al_2(CO_3)_3$ aluminum carbonate

g. Na_2SO_4 sodium sulfate

h. Na_2O sodium oxide

i. $Al_2(SO_4)_3$ aluminum sulfate

j. H_2SO_4 (aq) hydrogen sulfate

k. $NaNO_3$ sodium nitrate

l. PCl_5 phosphorus pentachloride

m. BiF_5 bismuth(V) fluoride

n. $HClO_3$ (aq) hydrogen chlorate

o. $FeCl_2$ iron(II) choride

p. N_2O dinitrogen monoxide

q. $CuClO_3$ copper(I) chlorate

r. Li_3PO_4 lithium phosphate

s. SnO tin(II) oxide

t. $SeCl_2$ selenium dichloride