

Key

Science 9 Test Ionic and Covalent Compounds Name: _____

1) Write the chemical name for the following Ionic Compounds (1 mark each)

a) BeS

Beryllium sulfide

b) $\text{Cu}(\text{NO}_3)_2$

Copper (II) nitrate

c) $\text{Bi}_3(\text{PO}_4)_5$

Bismuth (V) phosphate

d) CaF_2

Calcium fluoride

e) $\text{Cr}_2(\text{SO}_4)_3$

Chromium (III) sulfate

f) $\text{Ni}(\text{OH})_2$

Nickel (II) hydroxide

g) $\text{K}_2\text{Cr}_2\text{O}_7$

Potassium dichromate

h) $\text{Pb}(\text{CO}_3)_2$

Lead (II) carbonate

i) K_3P

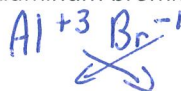
Potassium phosphide

j) NaHCO_3

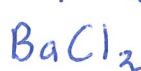
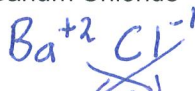
Sodium hydrogen carbonate
Sodium bicarbonate

2) Give formulas for the following Ionic Compounds (1 mark each) **Must show work**

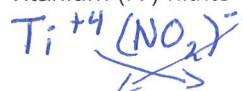
a) Aluminum bromide



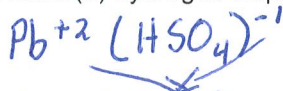
b) Barium Chloride



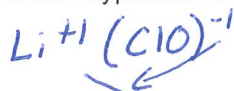
c) Titanium (IV) nitrite



d) Lead (II) hydrogen sulphate



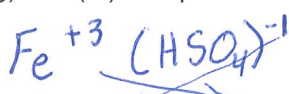
e) Lithium hypochlorite



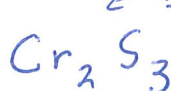
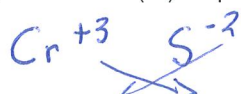
f) Sodium nitrate



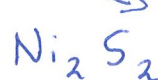
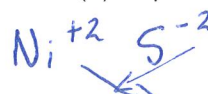
g) Iron (III) bisulphate



h) Chromium (III) sulphide



i) Nickel (II) sulphide



Key

3) Write the chemical name for each of the following Covalent Compounds (1 mark each)



Tricarbon difluoride



Tetraiodine diphosphide



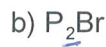
Dicarbon monochloride



Selenium triiodide



Dinitrogen tribromide



Diphosphorous monobromide



Iodine tetroxide



Trinitrogen monobromide



Chlorine disulfide

4) Write the chemical formula for each of the following Covalent Compounds (1 mark each)

a) Chlorine dioxide



d) Selenium difluoride



g) Arsenic pentachloride



b) Selenium trioxide



e) Dinitrogen pentoxide



h) Sulphur monochloride



c) Chlorine heptoxide



f) Dinitrogen monoxide



i) Diphosphorus pentoxide



5) Answer the following questions (1 mark each)

a) Define / explain an ionic bond?

- metal + non-metal

- cation + anion

- charges hold compound together ("+" "-")

b) Define / explain a covalent bond?

- non-metal + non-metal

- sharing of electrons

c) What is the difference between a multivalent metal ion and a polyatomic ion?

multivalent
- positive charge "+"
- has more than one charge
- metal
one atom

polyatomic
- more than one atom
- covalently bonded (share electrons)