

Name: \_\_\_\_\_

**Nomenclature Quiz #2 - SCH 4C**

$C^{4-}$	carbide	$CO_3^{2-}$	carbonate
$N^{3-}$	nitride	$NO_3^{1-}$	nitrate
$O^{2-}$	oxide	$PO_4^{3-}$	phosphate
$F^{1-}$	fluoride	$SO_4^{2-}$	sulphate
$P^{3-}$	phosphide	$ClO_3^{1-}$	chlorate
$S^{2-}$	sulphide	$OH^{1-}$	hydroxide
$Cl^{1-}$	chloride	$CN^{1-}$	cyanide
$As^{3-}$	arsenide		
$Se^{2-}$	selenide	$NH_4^{1+}$	ammonium
$Br^{1-}$	bromide		
$Sb^{3-}$	antimonide		
$Te^{2-}$	telluride		
$I^{1-}$	iodide		

1. Simple monovalent cation (only one oxidation state),  
elemental anion (ends in ide)
- a) NaCl      sodium chloride
- b)  $Al_2O_3$       aluminum oxide
- c)  $Na_2O$       sodium oxide
- d)  $K_3N$       potassium nitride
- e)  $Li_2S$       lithium sulphide
- f) calcium sulphide      CaS
- g) potassium oxide       $K_2O$
- h) magnesium chloride       $MgCl_2$
- i) zirconium sulphide       $ZrS_2$
- j) zinc bromide       $ZnBr_2$

2. Polyvalent Cation (more than one possible oxidation state), elemental anion.

1	2	3	4	5	6	7	8	9	10
I	II	III	IV	V	VI	VII	VIII	IX	X

- a) copper(II) nitride  $\text{Cu}_3\text{N}_2$
- b) copper(I) nitride  $\text{Cu}_3\text{N}$
- c) tin(IV) oxide  $\text{SnO}_2$
- d) tin(II) oxide  $\text{SnO}$
- e) lead(IV) nitride  $\text{Pb}_3\text{N}_4$
- f)  $\text{AuCl}_3$  gold(III) chloride
- g)  $\text{PCl}_5$  phosphorus(V) chloride
- h)  $\text{CuS}$  copper(II) sulphide
- i)  $\text{CuI}$  copper(I) iodide
- j)  $\text{As}_2\text{O}_3$  arsenic(III) oxide

3. Simple monovalent cation with polyatomic anions.

- a) lithium sulphate  $\text{Li}_2\text{SO}_4$
- b) magnesium hydroxide  $\text{Mg}(\text{OH})_2$
- c) zinc carbonate  $\text{ZnCO}_3$
- d) sodium phosphate  $\text{Na}_3\text{PO}_4$
- e) aluminum nitrate  $\text{Al}(\text{NO}_3)_3$
- f)  $\text{Na}_2\text{SO}_4$  sodium sulphate
- g)  $\text{Ca}(\text{NO}_3)_2$  calcium nitrate
- h)  $\text{K}_2\text{CO}_3$  potassium carbonate
- i)  $(\text{NH}_4)_3\text{PO}_4$  ammonium phosphate
- j)  $\text{KOH}$  potassium hydroxide

4. Polyvalent cation with polyatomic ion.

- a) tin(II) carbonate      SnCO<sub>3</sub>
- b) gold(III) sulphate      Au<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>
- c) lead(II) phosphate      Pb<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>
- d) copper(II) sulphate      CuSO<sub>4</sub>
- e) mercury(I) oxide      Hg<sub>2</sub>O
- f) Au(OH)<sub>3</sub>      gold(III) hydroxide
- g) Cu(ClO<sub>3</sub>)<sub>2</sub>      copper(II) chlorate
- h) Pb<sub>3</sub>(PO<sub>4</sub>)<sub>4</sub>      lead(IV) phosphate
- i) Sn(CO<sub>3</sub>)<sub>2</sub>      tin(IV) carbonate
- j) Co(NO<sub>3</sub>)<sub>2</sub>      cobalt(II) nitrate

5. Mixed Problems!!!!

- a) CO<sub>2</sub>      carbon(IV) oxide
- b) MgO      magnesium oxide
- c) (NH<sub>4</sub>)<sub>3</sub>PO<sub>4</sub>      ammonium phosphate
- d) Ag<sub>2</sub>CO<sub>3</sub>      silver carbonate
- e) V<sub>2</sub>O<sub>5</sub>      vanadium(V) oxide
- f) PbSO<sub>4</sub>      lead(II) sulphate
- g) NaCl      sodium chloride
- h) Mg(NO<sub>3</sub>)<sub>2</sub>      magnesium nitrate
- i) IrCl<sub>3</sub>      iridium(III) chloride
- j) Pt<sub>3</sub>(PO<sub>4</sub>)<sub>4</sub>      platinum(IV) phosphate