

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

**Nomenclature Quiz #1 - 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)  $K_2O$       potassium oxide
- c)  $MgCl_2$       magnesium chloride
- d)  $Al_2S_3$       aluminum sulphide
- e)  $Cs_3N$       cesium nitride
- f) lithium arsenide       $Li_3As$
- g) sodium bromide       $NaBr$
- h) calcium phosphide       $Ca_3P_2$
- i) magnesium carbide       $Mg_2C$
- j) aluminum oxide       $Al_2O_3$

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) iron(II) chloride FeCl<sub>2</sub>
- b) iron(II) sulphide FeS
- c) lead(IV) bromide PbBr<sub>4</sub>
- d) lead(IV) oxide PbO<sub>2</sub>
- e) tin(IV) nitride Sn<sub>3</sub>N<sub>4</sub>
- f) NiCl<sub>2</sub> nickel(II) chloride
- g) Au<sub>2</sub>O<sub>3</sub> gold(III) oxide
- h) Hg<sub>2</sub>O mercury(I) oxide
- i) CuCl<sub>2</sub> copper(II) chloride
- j) PI<sub>3</sub> phosphorus(III) iodide

3. Simple monovalent cation with polyatomic anions.

- a) sodium carbonate Na<sub>2</sub>CO<sub>3</sub>
- b) ammonium nitrate NH<sub>4</sub>NO<sub>3</sub>
- c) silver phosphate Ag<sub>3</sub>PO<sub>4</sub>
- d) zinc hydroxide Zn(OH)<sub>2</sub>
- e) aluminum sulphate Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>
- f) K<sub>2</sub>CO<sub>3</sub> potassium carbonate
- g) Mg(ClO<sub>3</sub>)<sub>2</sub> magnesium chlorate
- h) Sc<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub> scandium carbonate
- i) Ca(OH)<sub>2</sub> calcium hydroxide
- j) Na<sub>3</sub>PO<sub>4</sub> sodium phosphate

4. Polyvalent cation with polyatomic ion.

a) platinum(IV) chlorate Pt(ClO<sub>3</sub>)<sub>4</sub>

b) gold(I) sulphate Au<sub>2</sub>SO<sub>4</sub>

c) gold(III) carbonate Au<sub>2</sub>(CO<sub>3</sub>)<sub>3</sub>

d) lead(IV) hydroxide Pb(OH)<sub>4</sub>

e) iridium(VI) phosphate Ir(PO<sub>4</sub>)<sub>2</sub>

f) Au<sub>3</sub>PO<sub>4</sub> gold(I) phosphate

g) Sb<sub>2</sub>(SO<sub>4</sub>)<sub>5</sub> antimony(V) sulphate

h) As(OH)<sub>3</sub> arsenic(III) hydroxide

i) Au(CN)<sub>3</sub> gold(III) cyanide

j) PbSO<sub>4</sub> lead(II) sulphate

5. Mixed Problems!!!!

a) CS<sub>2</sub> carbon(IV) sulphide

b) Na<sub>2</sub>SO<sub>4</sub> sodium sulphate

c) SnCl<sub>4</sub> tin(IV) chloride

d) InCl<sub>3</sub> indium chloride

e) (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> ammonium sulphate

f) Cu(NO<sub>3</sub>)<sub>2</sub> copper(II) nitrate

g) OsO<sub>3</sub> osmium(VI) oxide

h) Ni(ClO<sub>3</sub>)<sub>3</sub> nickel(III) chlorate

i) Zr(SO<sub>4</sub>)<sub>2</sub> zirconium sulphate

j) CrO<sub>3</sub> chromium(VI) oxide