

Name: _____

Nomenclature Quiz #3 - 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) Ba₃N₂ barium nitride
- c) K₂S potassium sulphide
- d) Na₃P sodium phosphide
- e) CaCl₂ calcium chloride
- f) potassium nitride K₃N
- g) sodium sulphide Na₂S
- h) potassium oxide K₂O
- i) zinc nitride Zn₃N₂
- j) cadmium chloride CdCl₂

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) arsenic(III) oxide As₂O₃
- b) arsenic(V) oxide As₂O₅
- c) lead(II) sulphide PbS
- d) lead(IV) sulphide PbS₂
- e) bismuth(V) nitride Bi₃N₅
- f) CuCl₂ copper(II) chloride
- g) Sb₂O₅ antimony(V) oxide
- h) NiO nickel(II) oxide
- i) Fe₂O₃ iron(III) oxide
- j) Mn₃N₄ manganese(IV) nitride

3. Simple monovalent cation with polyatomic anions.

- a) sodium hydroxide NaOH
- b) calcium cyanide Ca(CN)₂
- c) zinc sulphate ZnSO₄
- d) scandium nitrate Sc(NO₃)₃
- e) aluminum sulphate Al₂(SO₄)₃
- f) Na₂CO₃ sodium carbonate
- g) (NH₄)₂SO₄ ammonium sulphate
- h) Na₂CO₃ sodium carbonate
- i) AlPO₄ aluminum phosphate
- j) Ca(OH)₂ calcium hydroxide

4. Polyvalent cation with polyatomic ion.

a) carbon(IV) chlorate $C(ClO_3)_4$

b) iron(II) phosphate $Fe_3(PO_4)_2$

c) gold(III) sulphate $Au_2(SO_4)_3$

d) copper(II) sulphate $CuSO_4$

e) copper(I) carbonate Cu_2CO_3

f) $Pb(NO_3)_4$ lead(IV) nitrate

g) $Co_2(SO_4)_3$ cobalt(III) sulphate

h) $Pb_3(PO_4)_4$ lead(IV) phosphate

i) $Pb(CO_3)_2$ lead(IV) carbonate

j) $Cu(OH)_2$ copper(II) hydroxide

5. Mixed Problems!!!!

a) SO_3 sulphur(VI) oxide

b) K_3N potassium nitride

c) $(NH_4)_3P$ ammonium phosphide

d) $ZnCO_3$ zinc carbonate

e) Mn_2O_7 manganese(VII) oxide

f) $HgSO_4$ mercury(II) sulphate

g) KBr potassium bromide

h) $Al(NO_3)_3$ aluminum nitrate

i) $Ir(CO_3)_3$ iridium(VI) carbonate

j) ZrS_2 zirconium sulphide