

# How do you rate your nomenclature ?

SNC2DE\_2010-2011

## Part A – Simple Binary Ionic Compounds

**Provide names for the following binary compounds:** (the charge of the simple ions – its oxidation state – are found on the periodic table)

1. KCl - potassium chloride
2. ZnCl<sub>2</sub>
3. ZnO
4. Na<sub>2</sub>S
5. CaBr<sub>2</sub>
6. BeS

**Provide formulae for the following binary compounds:**

1. calcium fluoride – CaF<sub>2</sub>
2. potassium chloride
3. sodium fluoride
4. magnesium oxide
5. calcium phosphide
6. strontium oxide

## Part B – Simple Binary Ionic Compounds Using the IUPAC System

**Provide names for the following binary compounds:**

1. HgF<sub>2</sub> – mercury (II) fluoride
2. Fe<sub>2</sub>O
3. SbCl<sub>3</sub>
4. CoF<sub>3</sub>
5. CuO
6. Cu<sub>2</sub>S

**Provide formulae for the following binary compounds**

1. nickel (II) iodide –  $\text{NiI}_2$
2. copper (II) sulphide
3. iron (III) oxide
4. manganese (IV) fluoride
5. manganese (II) fluoride
6. copper (I) chloride

**Part C – Simple Binary Covalent Compounds Using the Prefix System**

**Provide names for the following covalent compounds**

1.  $\text{NF}_3$  – nitrogen trifluoride
2.  $\text{OF}_2$
3.  $\text{AsBr}_3$
4.  $\text{XeO}_4$
5.  $\text{N}_2\text{O}_5$
6.  $\text{CCl}_4$

**Provide formulae for the following covalent compounds:**

1. carbon disulfide –  $\text{CS}_2$
2. nitrogen triiodide
3. dinitrogen oxide
4. tetraphosphorus pentoxide
5. tricarbon octahydride
6. dihydrogen monoxide

**Part D – Compounds with Polyatomic Ions**

1.  $\text{Ba(OH)}_2$  – barium hydroxide
2.  $\text{NH}_4\text{Cl}$
3.  $\text{H}_3\text{PO}_4$  (aq)
4.  $\text{LiMnO}_4$
5.  $\text{KClO}_3$
6.  $\text{Hg(CN)}_2$

7.  $\text{HNO}_{3(\text{aq})}$
8.  $\text{CaCO}_3$
9.  $\text{Ba}_3(\text{PO}_4)_2 \cdot 6\text{H}_2\text{O}$
10.  $\text{Fe}(\text{NO}_2)_2$

**Provide formulae for the following compounds:**

1. sodium nitrate –  $\text{NaNO}_3$
2. lead (II) chlorate
3. iron (II) sulfite
4. lead (II) phosphate
5. copper (II) acetate
6. copper (I) carbonate
7. potassium nitrate hexahydrate
8. calcium phosphate
9. zinc sulphate
10. iron (II) chlorate dihydrate

**Part E – Just a Bunch of Naming, No Pattern**

**Provide names, and/or formulas for the following compounds:**

- |   |                                     |
|---|-------------------------------------|
| 1. $\text{HgF}_2$ – mercury (II) fluoride | 11. Sodium acetate                  |
| 2. $\text{KCl}$                           | 12. Bromous acid                    |
| 3. $\text{KMnO}_4$                        | 13. Nickel (II) nitrate hexahydrate |
| 4. $\text{ZnO}$                           | 14. Radon difluoride                |
| 5. $\text{CaCO}_3$                        | 15. Barium sulphate                 |
| 6. $\text{Fe}_2\text{O}_3$                | 16. Silver carbonate                |
| 7. $\text{CoF}_3$                         | 17. Plumbic perchlorate             |
| 8. $\text{K}_2\text{SO}_4$                | 18. Ferric hydroxide                |
| 9. $\text{PF}_5$                          | 19. Stannic sulphide                |
| 10. $\text{Ag}_2\text{O}$                 | 20. Potassium dichromate            |