

Part A: Binary Ionic Compounds – I

1. Write the chemical formula for the following binary ionic compounds.

- | | | | |
|-----------------------|-------|------------------------|-------|
| a) calcium iodide | _____ | g) sodium bromide | _____ |
| b) barium hydride | _____ | h) magnesium phosphide | _____ |
| c) magnesium fluoride | _____ | i) aluminum arsenide | _____ |
| d) sodium nitride | _____ | j) barium oxide | _____ |
| e) lithium fluoride | _____ | k) calcium nitride | _____ |
| f) silver sulfide | _____ | l) potassium sulfide | _____ |

2. Name the following binary ionic compounds.

- | | | | |
|----------------------|-------|-----------------------------------|-------|
| a) KCl | _____ | g) ZnS | _____ |
| b) Na ₂ O | _____ | h) AlH ₃ | _____ |
| c) CaO | _____ | i) BaO | _____ |
| d) MgBr ₂ | _____ | j) Al ₂ S ₃ | _____ |
| e) LiH | _____ | k) SrF ₂ | _____ |
| f) ZnS | _____ | l) MgI ₂ | _____ |

Part B: Binary Ionic Compounds – II

3. Write the chemical formula for the following binary ionic compounds.

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|----------------------------|-------|--------------------------|-------|
| a) copper (II) iodide | _____ | g) copper (I) sulfide | _____ |
| b) iron (II) sulfide | _____ | h) tin (IV) bromide | _____ |
| c) gold (III) chloride | _____ | i) mercury (I) iodide | _____ |
| d) lead (IV) oxide | _____ | j) manganese (IV) oxide | _____ |
| e) manganese (II) fluoride | _____ | k) nickel (II) phosphide | _____ |
| f) iron (III) oxide | _____ | l) antimony (V) bromide | _____ |

4. Name the following binary ionic compounds.

a) FeCl_3 _____

b) Cu_3P _____

c) MnSe_2 _____

d) Au_2O _____

e) SnO_2 _____

f) NiS _____

k) Pb_3P_4 _____

l) Cu_3N _____

m) Co_2O_3 _____

n) HgCl_2 _____

o) MnS _____

p) AuP _____

Part C - Ternary Ionic Compounds

5. Write the chemical formula for the following ternary ionic compounds.

g) calcium nitrate _____

h) barium hydroxide _____

i) lead (II) carbonate _____

j) sodium nitrite _____

k) ammonium fluoride _____

l) iron (III) sulfate _____

k) sodium bicarbonate _____

l) manganese (IV) oxalate _____

m) aluminum sulfite _____

n) potassium fluorate _____

o) nickel (II) bromate _____

p) silver chlorate _____

6. Name the following ternary ionic compounds.

g) KNO_3 _____

h) Na_2SO_3 _____

i) $\text{Pb}(\text{CO}_3)_2$ _____

j) CuOH _____

k) $\text{Ca}_3(\text{PO}_4)_2$ _____

l) ZnC_2O_4 _____

k) $\text{Sn}_3(\text{PO}_3)_2$ _____

l) Hg_2SO_4 _____

m) $\text{NaC}_2\text{H}_3\text{O}_2$ _____

n) MnCrO_4 _____

o) $\text{Ba}(\text{ClO}_3)_2$ _____

p) AuOH _____