

Group  
Name:

# Nomenclature Worksheet

LibreTexts page: [2: Nomenclature](#)

<https://chem.libretexts.org/link?214085>

Please don't edit, rearrange or delete anything that is already in this document. Just fill in the answers.

Use shortcuts for superscripts and subscripts:

X<sup>²</sup> Superscript      Ctrl+.

X<sub>₂</sub> Subscript      Ctrl+,

## Part I

Write the names of monatomic ions.

Ion	Name
Ca <sup>2+</sup>	
S <sup>2-</sup>	
Fe <sup>3+</sup>	
I <sup>-</sup>	
Hg <sup>2+</sup>	
Br <sup>-</sup>	
Co <sup>2+</sup>	

## Part II

Combine each pair of ions, write formulas of the compounds they form and compounds names.

Ions	Compound formula	Compound name
$\text{Al}^{3+}$ and $\text{O}^{2-}$		
$\text{Ni}^{2+}$ and $\text{S}^{2-}$		
$\text{Cu}^{2+}$ and $\text{P}^{3-}$		
$\text{K}^+$ and $\text{CrO}_4^{2-}$		
$\text{Sn}^{4+}$ and $\text{Cl}^-$		
$\text{Co}^{2+}$ and $\text{NO}_2^-$		
$\text{Mg}^{2+}$ and $\text{F}^-$		
$\text{Ca}^{2+}$ and $\text{Br}^-$		

## Part III

Name compounds and write ions it consists of.

Compound	Name	Ions
$\text{LiCN}$		
$\text{Co}_3\text{N}_2$		
$\text{Sn}(\text{Cr}_2\text{O}_7)_2$		
$\text{Fe}_2(\text{SO}_4)_3$		
$\text{Ni}(\text{MnO}_4)_2$		
$\text{K}_2\text{SO}_3$		

## Part IV

Name each covalent compound from its formula.

Compound	Name
$\text{PCl}_3$	
$\text{SF}_2$	
$\text{NCl}_3$	
$\text{CCl}_4$	
$\text{PI}_5$	
$\text{SO}_3$	

## Part V

Write formulas for each compound.

Name	Formula
Ammonium bicarbonate	
Dichlorine heptoxide	
Dinitrogen pentasulfide	

## Part VI

Fill in missing information for the following acids.

Formula	Name
$\text{H}_3\text{PO}_3$	
	Sulfurous acid
$\text{H}_2\text{SO}_4$	
	Phosphoric acid
	Hypochlorous acid
$\text{HNO}_3$	

	Acetic acid
HIO	

## Part VII

Fill in the missing information.

Formula	Name
	Zinc sulfate
$\text{Fe}_2(\text{SO}_4)_3$	
	Barium hydroxide
$\text{PbS}_2$	
$\text{Al}(\text{CN})_3$	
	Manganese (II) sulfide
$\text{PbS}$	
	Vanadium (V) oxide