

## Nomenclature Worksheet 2: Simple Binary Ionic Compounds

*Please complete the following table:*

Name of Ionic Compound	Formula of Ionic Compound
1. Sodium bromide	
2. Calcium chloride	
3. Magnesium sulfide	
4. Aluminum oxide	
5. Lithium phosphide	
6. Cesium nitride	
7. Potassium iodide	
8. Barium fluoride	
9. Rubidium nitride	
10. Barium oxide	
11.	$K_2O$
12.	$Mg_2$
13.	$AlCl_3$
14.	$CaBr_2$
15.	$Na_3N$
16.	$LiF$
17.	$Ba_3P_2$
18.	$Cs_2S$
19.	$SrF_2$
20.	$NaCl$

Nomenclature Worksheet 3:  
**Ionic Compounds Containing Polyatomic Ions**

*Please complete the following table:*

Name of Ionic Compound	Formula of Ionic Compound
1. Sodium chromate	
2. Calcium carbonate	
3. Magnesium nitrate	
4. Aluminum sulfate	
5. Lithium phosphate	
6. Ammonium chloride	
7. Cesium chlorate	
8. Potassium sulfate	
9. Barium acetate	
10. Rubidium cyanide	
11.	KCH <sub>3</sub> CO <sub>2</sub>
12.	Mg <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>
13.	Al(ClO <sub>3</sub> ) <sub>3</sub>
14.	CaSO <sub>4</sub>
15.	Sr(HCO <sub>3</sub> ) <sub>2</sub>
16.	NaNO <sub>3</sub>
17.	Li <sub>2</sub> CO <sub>3</sub>
18.	Ba(NO <sub>3</sub> ) <sub>2</sub>
19.	Cs <sub>2</sub> CrO <sub>4</sub>
20.	NH <sub>4</sub> OH

Nomenclature Worksheet 4:  
**Ionic Compounds Containing Transition Metals**

*Please complete the following table:*

Name of Ionic Compound	Formula of Ionic Compound
1. Copper (II) sulfate	
2. Copper (I) oxide	
3. Chromium (III) cyanide	
4. Cobalt (II) hydroxide	
5. Silver bromide	
6. Zinc nitrate	
7. Iron (III) acetate	
8. Lead (IV) sulfate	
9.	FeCl <sub>2</sub>
10.	PbSO <sub>3</sub>
11.	Co <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub>
12.	AgNO <sub>3</sub>
13.	Zn(CN) <sub>2</sub>
14.	CuClO <sub>3</sub>
15.	Cr(OH) <sub>3</sub>
16.	Hg <sub>2</sub> O

## Nomenclature Worksheet 6: Binary Covalent Compounds

Please complete the following table:

Name of <i>Covalent</i> Compound	Formula of <i>Covalent</i> Compound
1. carbon dioxide	
2. phosphorus triiodide	
3. sulfur dichloride	
4. nitrogen trifluoride	
5. dioxygen difluoride	
	6. N <sub>2</sub> F <sub>4</sub>
	7. SCl <sub>4</sub>
	8. ClF <sub>3</sub>
	9. SiO <sub>2</sub>
	10. P <sub>4</sub> O <sub>10</sub>

Determine whether the following compounds are **covalent** or **ionic** and give them their proper names.

1. Ba(NO<sub>3</sub>)<sub>2</sub>
2. CO
3. PCl<sub>3</sub>
4. KI
5. CF<sub>4</sub>
6. MgO
7. Cu<sub>2</sub>S
8. SO<sub>2</sub>
9. NCl<sub>3</sub>
10. XeF<sub>6</sub>