

## Chemical Formula Writing Worksheet Two

Write chemical formulas for the compounds in each box. The names are found by finding the intersection between the cations and anions. Example: The first box is the intersection between the "zinc" cation and the "chloride" anion, so you should write "ZnCl<sub>2</sub>", as shown.

### Cations

<b>Anions</b>	<i>zinc</i>	<i>iron (II)</i>	<i>iron (III)</i>	<i>gallium</i>	<i>silver</i>	<i>lead (IV)</i>
<i>chloride</i>	ZnCl <sub>2</sub>					
<i>acetate</i>						
<i>nitrate</i>						
<i>oxide</i>						
<i>nitride</i>						
<i>sulfate</i>						

Write the formulas for the following compounds:

- 1) copper (II) chloride \_\_\_\_\_
- 2) lithium acetate \_\_\_\_\_
- 3) vanadium (III) selenide \_\_\_\_\_
- 4) manganese (IV) nitride \_\_\_\_\_
- 5) beryllium oxide \_\_\_\_\_
- 6) sodium sulfate \_\_\_\_\_
- 7) aluminum arsenide \_\_\_\_\_
- 8) potassium permanganate \_\_\_\_\_
- 9) chromium (VI) cyanide \_\_\_\_\_
- 10) tin (II) sulfite \_\_\_\_\_
- 11) vanadium (V) fluoride \_\_\_\_\_
- 12) ammonium nitrate \_\_\_\_\_

## Chemical Formula Writing Worksheet Solutions

Write chemical formulas for the compounds in each box. The names are found by finding the intersection between the cations and anions. Example: The first box is the intersection between the "zinc" cation and the "chloride" anion, so you should write "ZnCl<sub>2</sub>", as shown.

	<i>zinc</i>	<i>iron (II)</i>	<i>iron (III)</i>	<i>gallium</i>	<i>silver</i>	<i>lead (IV)</i>
<i>chloride</i>	<b>ZnCl<sub>2</sub></b>	<b>FeCl<sub>2</sub></b>	<b>FeCl<sub>3</sub></b>	<b>GaCl<sub>3</sub></b>	<b>AgCl</b>	<b>PbCl<sub>4</sub></b>
<i>acetate</i>	<b>Zn(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>2</sub></b>	<b>Fe(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>2</sub></b>	<b>Fe(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>3</sub></b>	<b>Ga(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>3</sub></b>	<b>Ag C<sub>2</sub>H<sub>3</sub>O<sub>2</sub></b>	<b>Pb(C<sub>2</sub>H<sub>3</sub>O<sub>2</sub>)<sub>4</sub></b>
<i>nitrate</i>	<b>Zn(NO<sub>3</sub>)<sub>2</sub></b>	<b>Fe(NO<sub>3</sub>)<sub>2</sub></b>	<b>Fe(NO<sub>3</sub>)<sub>3</sub></b>	<b>Ga(NO<sub>3</sub>)<sub>3</sub></b>	<b>AgNO<sub>3</sub></b>	<b>Pb(NO<sub>3</sub>)<sub>4</sub></b>
<i>oxide</i>	<b>ZnO</b>	<b>FeO</b>	<b>Fe<sub>2</sub>O<sub>3</sub></b>	<b>Ga<sub>2</sub>O<sub>3</sub></b>	<b>Ag<sub>2</sub>O</b>	<b>PbO<sub>2</sub></b>
<i>nitride</i>	<b>Zn<sub>3</sub>N<sub>2</sub></b>	<b>Fe<sub>3</sub>N<sub>2</sub></b>	<b>FeN</b>	<b>GaN</b>	<b>Ag<sub>3</sub>N</b>	<b>Pb<sub>3</sub>N<sub>4</sub></b>
<i>sulfate</i>	<b>ZnSO<sub>4</sub></b>	<b>FeSO<sub>4</sub></b>	<b>Fe<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub></b>	<b>Ga<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub></b>	<b>Ag<sub>2</sub>SO<sub>4</sub></b>	<b>Pb(SO<sub>4</sub>)<sub>2</sub></b>

Write the formulas for the following compounds:

- 1) copper (II) chloride **CuCl<sub>2</sub>**
- 2) lithium acetate **LiC<sub>2</sub>H<sub>3</sub>O<sub>2</sub>**
- 3) vanadium (III) selenide **VSe**
- 4) manganese (IV) nitride **Mn<sub>3</sub>N<sub>4</sub>**
- 5) beryllium oxide **BeO**
- 6) sodium sulfate **Na<sub>2</sub>SO<sub>4</sub>**
- 7) aluminum arsenide **AlAs**
- 8) potassium permanganate **KMnO<sub>4</sub>**
- 9) chromium (VI) cyanide **Cr(CN)<sub>6</sub>**
- 10) tin (II) sulfite **SnSO<sub>3</sub>**
- 11) vanadium (V) fluoride **VF<sub>5</sub>**
- 12) ammonium nitrate **NH<sub>4</sub>NO<sub>3</sub>**