

**Practice Finding Name and Formula**

1. Which of the following are ionic compounds? Which are covalent compounds? Name each compound.

#	Formula	Ionic or Covalent?	NAME
a)	MgF <sub>2</sub>		
b)	CCl <sub>4</sub>		
c)	NaC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>		
d)	Fe(NO <sub>3</sub> ) <sub>3</sub>		
e)	CoPO <sub>4</sub>		
f)	Al <sub>2</sub> S <sub>3</sub>		
g)	HCl		
h)	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>		

2. Name the following ionic compounds:

- |                                    |  |
|------------------------------------|--|
| a) Na <sub>2</sub> SO <sub>4</sub> | b) K <sub>2</sub> S                                |
| c) CuNO <sub>3</sub>               | d) Ba <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> |

3. Give the formulas for the following ionic compounds:

- |                        |                           |
|------------------------|---------------------------|
| a) aluminum hydroxide  | b) iron (III) nitride     |
| c) magnesium phosphate | d) ammonium sulfate       |
| e) silver carbonate    | f) manganese (II) nitrate |

4. Give the formulas for the following covalent compounds:

- |                    |                             |
|--------------------|-----------------------------|
| a) sulfur trioxide | b) hydrobromic acid         |
| c) carbonic acid   | d) dinitrogen tetrachloride |

5. Fill in the following table:

	<b>Name</b>	<b>Formula</b>
1		KCl
2		Co(OH) <sub>2</sub>
3		SO <sub>2</sub>
4		Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>
5		HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>
6		Li <sub>2</sub> S
7	ammonium carbonate	
8	dinitrogen tetroxide	
9	silver sulfate	
10	magnesium nitrate	
11	copper(II) bicarbonate	
12	aluminum phosphide	

### Answers to Practice Finding Name and Formula

1. Which of the following are ionic compounds? Which are covalent compounds? Name each compound.

#	Formula	Ionic or Covalent?	NAME
a)	MgF <sub>2</sub>	I	magnesium fluoride
b)	CCl <sub>4</sub>	C	carbon tetrachloride
c)	NaC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>	I	sodium acetate
d)	Fe(NO <sub>3</sub> ) <sub>3</sub>	I	iron (III) nitrate
e)	CoPO <sub>4</sub>	I	cobalt (III) phosphate
f)	Al <sub>2</sub> S <sub>3</sub>	I	aluminum sulfide
g)	HCl	C	hydrochloric acid
h)	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>	I	ammonium carbonate

2. Name the following ionic compounds:

- |                                    |                   |  |                   |
|------------------------------------|-------------------|--|-------------------|
| a) Na <sub>2</sub> SO <sub>4</sub> | sodium sulfate    | b) K <sub>2</sub> S                                | potassium sulfide |
| c) CuNO <sub>3</sub>               | copper(I) nitrate | d) Ba <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> | barium phosphate  |

3. Give the formulas for the following ionic compounds:

- |                        |   |                           |   |
|------------------------|---|---------------------------|---|
| a) aluminum hydroxide  | Al(OH) <sub>3</sub>                             | b) iron (III) nitride     | FeN   |
| c) magnesium phosphate | Mg <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> | d) ammonium sulfate       | (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> |
| e) silver carbonate    | Ag <sub>2</sub> CO <sub>3</sub>                 | f) manganese (II) nitrate | Mn(NO <sub>3</sub> ) <sub>2</sub>               |

4. Give the formulas for the following covalent compounds:

- |                    |                                |                             |                                |
|--------------------|--------------------------------|-----------------------------|--------------------------------|
| a) sulfur trioxide | SO <sub>3</sub>                | b) hydrobromic acid         | HBr                            |
| c) carbonic acid   | H <sub>2</sub> CO <sub>3</sub> | d) dinitrogen tetrachloride | N <sub>2</sub> Cl <sub>4</sub> |

## 5. Answers in Red

	Name	Formula
1	Potassium chloride	KCl
2	Cobalt(II) hydroxide	Co(OH) <sub>2</sub>
3	Sulfur dioxide	SO <sub>2</sub>
4	Iron(II) phosphate	Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>
5	Acetic acid	HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>
6	Lithium sulfide	Li <sub>2</sub> S
7	ammonium carbonate	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>
8	dinitrogen tetroxide	N <sub>2</sub> O <sub>4</sub>
9	silver sulfate	Ag <sub>2</sub> SO <sub>4</sub>
10	magnesium nitrate	Mg(NO <sub>3</sub> ) <sub>2</sub>
11	copper(II) bicarbonate	Cu(HCO <sub>3</sub> ) <sub>2</sub>
12	aluminum phosphide	AlP