

How Compounds Form**Compound**

- A \_\_\_\_\_ made up of \_\_\_\_\_ elements that are \_\_\_\_\_ combined

**Examples of Compounds**

1. Water

- \_\_\_\_\_

2. Hydrogen Peroxide

- \_\_\_\_\_

3. Carbon Dioxide

- \_\_\_\_\_

4. Carbon Monoxide

- \_\_\_\_\_

**Chemical Formulas**

- a combination of symbols that represents a \_\_\_\_\_
- indicates what elements are present and in what \_\_\_\_\_
- uses \_\_\_\_\_ to indicate \_\_\_\_\_ of the element are present

Molecule	Type of atoms	# of each atom	Total #of atoms
MgCO <sub>3</sub>			
Li <sub>2</sub> S			
H <sub>3</sub> PO <sub>4</sub>			
Ca(NO <sub>3</sub> ) <sub>2</sub>			

## Ionic Compounds

- an ionic compound results when a \_\_\_\_\_ is attracted to a \_\_\_\_\_
- the metal is positive because they have a tendency to \_\_\_\_\_ electrons, while the nonmetal is negative because they have a tendency to \_\_\_\_\_ electrons
- the result is a compound that is electrically \_\_\_\_\_
- the attraction of the ions is known as an \_\_\_\_\_

Explain using diagrams how sodium and chlorine react to form an ionic compound.

Explain using diagrams how beryllium and fluorine react to form an ionic compound.

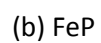
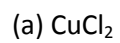
Explain using diagrams how aluminum and fluorine react to form an ionic compound.

## Multivalent Elements

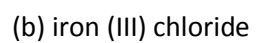
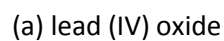
Certain elements have multiple ionic charges:

Metal	Symbol	Ion	Name of Ion

Write the names for the following compounds:



Write the formulas for the following compounds:



### Names for Compounds

Write the appropriate names for the following compounds: (use your periodic table)

1. NaCl \_\_\_\_\_
2. BaCl<sub>2</sub> \_\_\_\_\_
3. KI \_\_\_\_\_
4. Li<sub>2</sub>O \_\_\_\_\_
5. MgO \_\_\_\_\_
6. K<sub>2</sub>S \_\_\_\_\_
7. FeO \_\_\_\_\_
8. Fe<sub>2</sub>O<sub>3</sub> \_\_\_\_\_

### Formulas for Compounds

Write the appropriate chemical formula for the following compounds: (use your periodic table)

1. Calcium oxide \_\_\_\_\_
2. Barium sulfide \_\_\_\_\_
3. Lithium chloride \_\_\_\_\_
4. Potassium oxide \_\_\_\_\_
5. Aluminum chloride \_\_\_\_\_
6. Silver sulfide \_\_\_\_\_
7. Copper (II) chloride \_\_\_\_\_
8. Iron (III) sulfide \_\_\_\_\_