Ionic compounds consist of cations (positive ions) and [anions](http://chemistry.about.com/od/chemistryglossary/a/Aniondefinition.htm) (negative ions). The nomenclature, or naming, of ionic compounds is based on the names of the component ions. Here are the principal naming conventions for ionic compounds, along with examples to show how they are used:

* **Roman Numerals**  
  A Roman numeral in parentheses, followed by the name of the element, is used for elements that can form more than one positive ion. This is usually seen with metals. You can use [a chart](http://chemistry.about.com/od/electronicstructure/a/Valences-Of-The-Elements.htm) to see the possible valences for the elements.

Fe2+ Iron (II)  
Fe3+ Iron (III)  
Cu+ Copper (I)  
Cu2+ Copper (II)

* **-ous and -ic**  
  Although Roman numerals are used to denote the ionic charge of cations, it is still common to see and use the endings **-ous** or **-ic**. These endings are added to the Latin name of the element (e.g., *stannous*/*stannic* for tin) to represent the ions with lesser or greater charge, respectively. The Roman numeral naming convention has wider appeal because many ions have more than two valences.

Fe2+ Ferrous  
Fe3+ Ferric  
Cu+ Cuprous  
Cu2+ Cupric

* **-ide**  
  The **-ide** ending is added to the name of a monoatomic ion of an element.

H- Hydride  
F- Fluoride  
O2- Oxide  
S2- Sulfide  
N3- Nitride  
P3- Phosphide

* **-ite and -ate**  
  Some polyatomic anions contain oxygen. These anions are called **oxyanions**. When an element forms two oxyanions, the one with less oxygen is given a name ending in **-ite** and the one with more oxgyen is given a name that ends in **-ate**.

NO2- Nitrite  
NO3- Nitrate  
SO32- Sulfite  
SO42- Sulfate

* **hypo- and per-**  
  In the case where there is a series of four oxyanions, the **hypo-** and **per-** prefixes are used in conjunction with the **-ite** and **-ate** suffixes. The **hypo-** and **per-** prefixes indicate less oxygen and more oxygen, respectively.

ClO- Hypochlorite  
ClO2- Chlorite  
ClO3- Chlorate  
ClO4- Perchlorate

* **bi- and di- hydrogen**  
  Polyatomic anions sometimes gain one or more H+ ions to form anions of a lower charge. These ions are named by adding the word **hydrogen** or **dihydrogen** in front of the name of the anion. It is still common to see and use the older naming convention in which the prefix **bi-** is used to indicate the addition of a single hydrogen ion.

HCO3- Hydrogen carbonate or bicarbonate  
HSO4- Hydrogen sulfate or bisulfate  
H2PO4- Dihydrogen phosphate