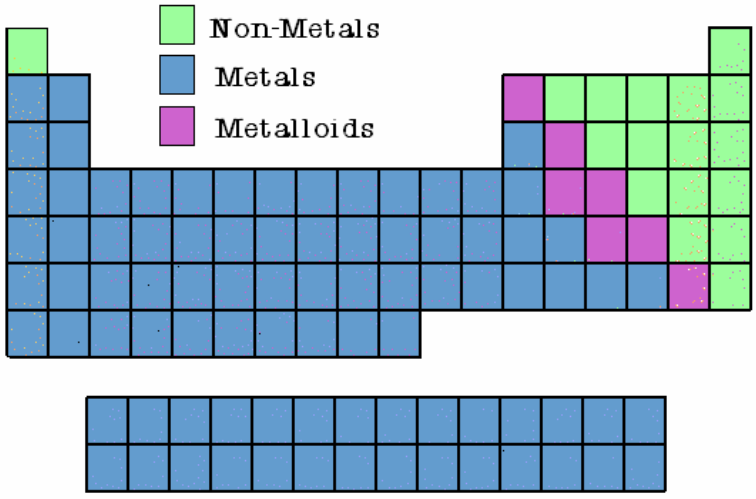
IONIC COMPOUNDS

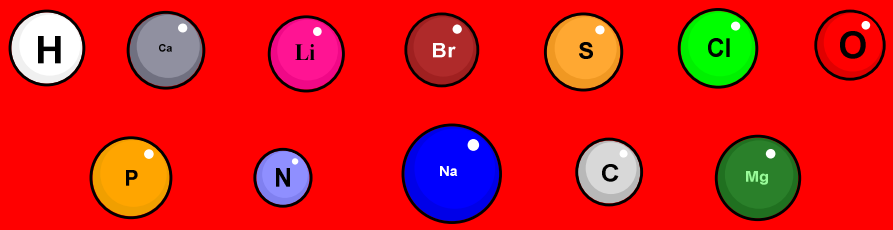
The elements of the periodic table can be divided into three main categories: Metals, Non-Metals, and Metalloids.



Reviewing metals and non-metals

Classify each element as a metal or a non-metal by dragging each element to the correct category.

Metal **Non-metal**



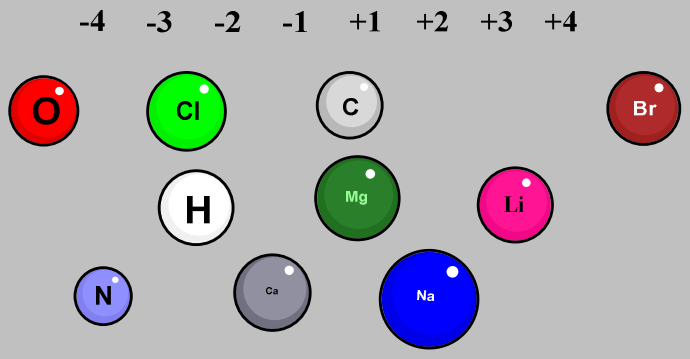
1	2
Li	Be
lose 1 e-	lose 2 e-
+1	+2

3	4	5	6	7	8
B	C	N	O	F	Ne
lose 3 e-		gain 3 e-	gain 2 e-	gain 1 e-	
+3		-3	-2	-1	

Identify the charge that each of the following atoms gets when they form ions

Cations

Anions



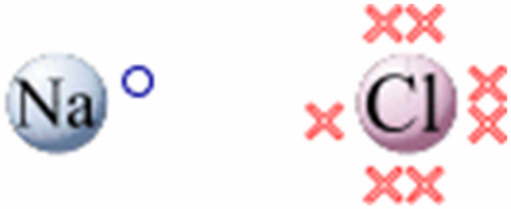
Ionic Bonds
Text Ref. 2.2 p 68-73

- What is an Ionic Bond?
  - -An Ionic Bond is a chemical bond resulting from the TRANSFER of electrons from a metal to a nonmetal

- When an ionic bond forms
  - -The metal forms a cation (positive ion)
  - -The non metal forms an anion (negative ion).

Ionic Bonds

- What holds an Ionic Bond together?
  - -electrostatic attraction
  - -opposite charged ions attract each other



Reviewing types of chemical bonds
(Move each statement under the correct category.)

IONIC BONDS	COVALENT BONDS

Two non-metals combine

Electrons are shared

Each element has a charge
Opposite charges attract

A metal and a non-metal combine

Electrons are transferred

metal forms cation
nonmetal forms anion

bond between an anion and a cation

difference in electronegativity greater than 1.7

Construct your own Lewis Dot & Structural Diagrams for Ionic Compounds