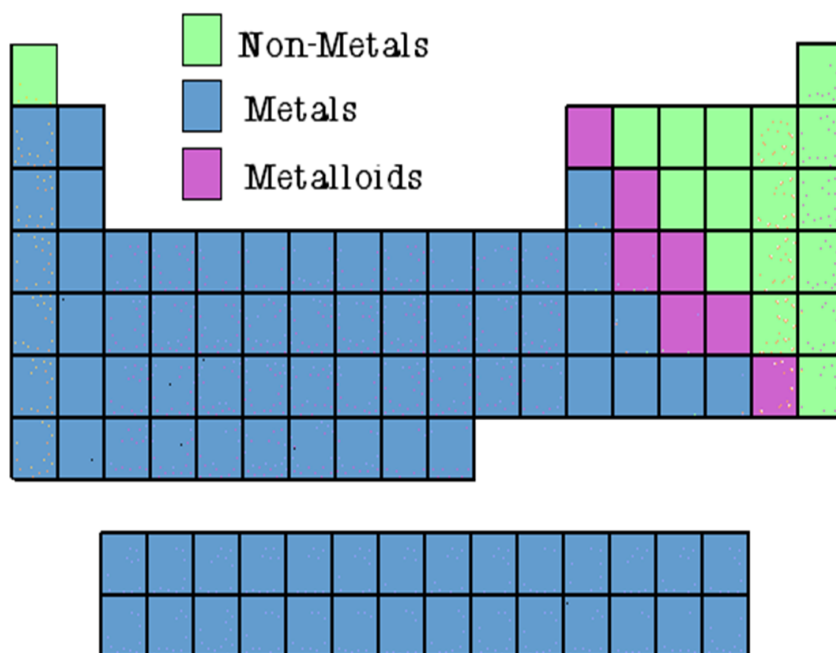


The elements of the periodic table can be divided into three main categories: Metals, Non-Metals, and Metalloids.



Mar 7-3:51 PM

Metals usually have 1, 2, or 3 valence ^(outer shell) electrons and tend to lose them to form positive ions, called cations.

↓
+ = +

Non-metals usually have

5, 6, or 7 valence electrons and tend to gain to form negative ions, called anions.

Mar 7-4:23 PM

* Rows are called Periods.

* Columns are called Groups or Families.

* Elements in the same group share similar, but not exact, characteristics.

Mar 7-4:24 PM

GROUP 1 - ALKALI METALS

* Does not include hydrogen!

* Shiny, silvery metals.

* Form compounds that are white solids and are soluble in water. Ex: NaCl (salt)

* Have 1 valence electron

* Form 1+ cations



Mar 7-4:29 PM

GROUP 2 - ALKALINE EARTH METALS

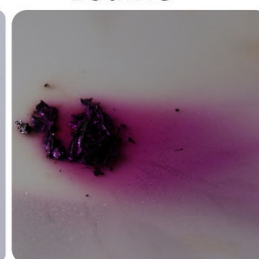


- * Also shiny, silvery metals.
- * Form compounds that are often insoluble in water.
- * Have 2 valence electrons
- * Form 2+ cations

Mar 7-4:36 PM

GROUP 17 - HALOGENS

- * All are poisonous
- * React readily with alkali metals. Ex: KBr, NaCl
- * Have 7 valence electrons
- * Form 1- anions

Chlorine**Bromine****Iodine**

Mar 7-4:56 PM

GROUP 18 - NOBLE GASES

- * Generally do not form compounds.
- * They are already stable. (have 8 valence electrons)



Mar 7-5:01 PM

Groups 1, 2, and 13-18 are known as the representative elements.

Groups 3-12 in the centre of the periodic table are known as the transition metals.

Metalloids are found between the metals and non-metals because they share properties with both metals and non-metals.

Mar 7-5:03 PM

Element Name	Symbol	Group/Family Number	Period Number	Metal, non-metal, or metalloid	Group/Family Name
Chlorine	Cl	17	3	Non-Metal	Halogen
Magnesium	Mg	2	3	Metal	Alkaline Earth M.
Helium	He	18	1	Non-metal	Noble Gas
Nitrogen	N	15	2	Non-metal	Representative E.
Iodine	I	17	5	Non-metal	Halogen
Sodium	Na	1	3	Metal	Alkali Metal
Mercury	Hg	12	6	Metal	Transition M.
Silver	Ag	11	5	Metal	Transition M.
Silicon	Si	14	3	Metalloid	Representative E.
Potassium	K	1	4	Metal	Alkali Metal

Mar 31-11:08 AM

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Mar 31-11:15 AM

Attachments

Noble Gas.jfif

Chem joke.jfif