

The periodic table

- * Mendeleev arranged his periodic table in order of atomic mass.
- * Each horizontal row of elements in the periodic table is a period.
- * the properties of elements change as you move across a period
- * The Periodic law: when elements are arranged in order of increasing atomic number
- * Each Vertical Column of elements is a group
- * Elements in the same group have similar physical and chemical properties.
- * A metal: a type of element that is good conductor of heat and electricity. $\rightarrow$ 80% of the elements are metal. # exception of mercury all elements are solids at room temp
- * Malleable: Can be shaped into different physical forms.
- * ductile: Can be pulled and stretched into wires.
- * nonmetal: an element that tends to be a poor conductor of heat and electric current.
 - $\rightarrow$ Most are gases at room temp.
 - 5 nonmetal (C, P, S, I, Se) are solids and (Br) is liquid.
- * exception: Carbon as graphite.
- * solid non-metal tend to be brittle.

A metalloid: an element that tends to have properties similar to metal and nonmetal

* All Solid

* Poor conductors of heat + electricity

* don't exhibit luster.