

Metals, Metalloids and Non-Metals

The periodic table cannot only be divided into families but it can also be organized into four groupings. As the table illustrates, members of the groupings share many properties.

Grouping	Examples	Location	Physical Properties
Metals	Alkali metals, alkaline earth metals, transition metals(Sc, Ti, V etc)	With exception of H and metalloids, all elements to the LEFT of staircase.	good conductors of electricity and heat; shiny, malleable, usually high density and high melting ,except for alkalis; many react with acid
Metalloids	B, Si, Ge, As, Sb, Te, Po:	With exception of Al, elements that border the staircase (jagged line in periodic table)	semi-conductors; some shiny; don't react with acid; not malleable
Nonmetals	N, O, S, P, Cl, Br, Se etc	With exception of metalloids and noble gases, elements to the right of the staircase.	poor conductors of heat and electricity; low-melting; react with metals and non-metals.
Noble Gases	He, Ne, Ar, Kr, xe, Rn	Last column of the periodic family	All gases at room temperature; poor conductors of heat and electricity generally unreactive