

s-Block Elements

Have ns^1 and ns^2 outermost electronic configuration

Group 1 - Alkali metals

Group 2 - Alkaline earth metals

p-Block Elements

Group 13 to 18

The outermost electronic configuration of elements in a period varies from ns^2np^1 to ns^2np^6

d-Block Elements

Transition elements

Group 3 to 12 with the outer electronic configuration $(n-1)d^{1-10} ns^{0-2}$

f-Block Elements

Inner-transition elements

Lanthanides - Ce(Z = 58) to Lu(Z = 71)

Actinides - Th(Z = 90) to Lr (Z = 103)

outer electronic configuration is $(n-2)f^{1-14} (n-1)d^{0-1} ns^2$

Atomic Radius

Generally decreases across a period

Increases as we go down a group

Ionization Enthalpy

The tendency of an element to lose an electron

Generally increases across a period

Decreases as we go down a group

Electron Gain Enthalpy

The tendency of an element to gain an electron

Generally becomes more negative across a period

Becomes less negative as we go down the group

Electronegativity

The tendency of an atom in a compound to attract the shared electrons towards itself

Generally increases across a period

Decreases as we go down a group

Ionic Radius

A cation is smaller than its parent atom

An anion is larger than that of the parent atom

Metallic Radius

Half the internuclear distance between the two adjacent atoms in the metallic crystal

