

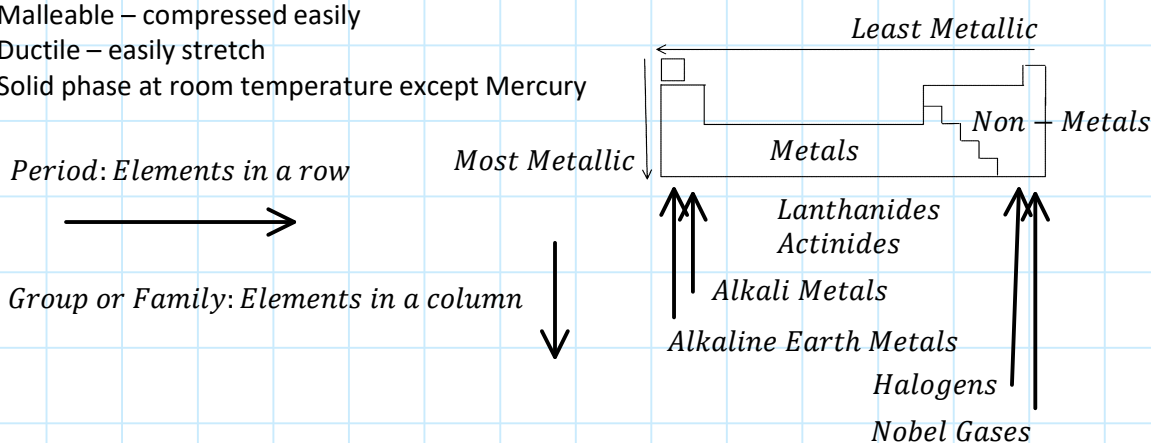
C11 - 5.3 - Periodic Table Properties/Trends Notes

Properties of metals:

- Shiny with a metallic lustre
- Good conductors of heat and electricity
- Sometimes flexible if thin
- Malleable – compressed easily
- Ductile – easily stretch
- Solid phase at room temperature except Mercury

Properties of non-metals:

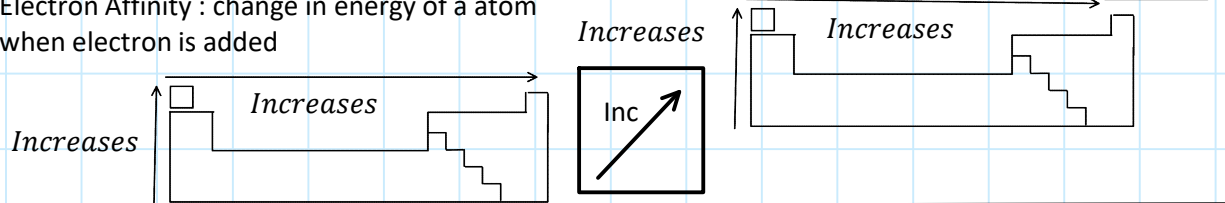
- Gases liquids and weak solids at room temperature
- Bad conductors of and electricity



Ionization energy: the energy required to take away an electron from an uncharged atom.

Electron Affinity : change in energy of a atom when electron is added

Electronegativity: the tendency of an atom to attract/hold electrons.



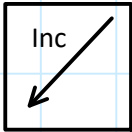
Size of Atom:

Less p^+ pulling in e^-

Increases (More Shells)

Increases

Size Inc



F vs O: $9 p^+$ pulling 7 valence e^- is a tighter shell than $8 p^+$ pulling 6 valence e^- .

Size of Ion: (Anions (-ve) Larger, gain electron/Cations (+ve) Smaller, lose electrons)