May 24, 2016

Alkali Metals

soft

low melting and boiling temperatures

The MOST reactive

reactive in water

+1 Ion's because it drops the last electron
Alkaline Earth Metals

Physical: shiny and silvery
harder/more dense than alkali metals
reactivity: less than Alkali but reacts with water at room temp and boiling water
Ionization: +2 Cations

Transition Metals

Physical:
- Hard, high melting and boiling point
- High density
- Good conductors
- Ductile: (laffy taffy) Appear hard but bends without breaking
Reactivity: less reactive than alkali metals
- lower reactivity than alkaline metals and halogens
- higher reactivity than noble gasses
Ion Formation: lose electrons and become Cations
"Super Sharers" Give away lots!!!
- +1, +2, +3, +4
Metalloids

Physical Characteristics:
- Metallic
- Brittle
- Solid
- Semi-conductor: good conductors when they are hot
- Reactivity: depends on what is reacting with
  - not as reactive as other metals
- No Group Number: (13-16)
- Ion formation depends on the column
  - boron's column is +3, C's column is +/- 4...

Non-Metals

Group numbers 1, 14-16
- poor conductor
- brittle
- dull - does not reflect light
- fewer energy levels = more reactive
- more energy levels = less reactive
- Ions, +/-4, -3, -2 mostly Anions
Halogens

Non-metallic, toxic
Very reactive, less as you go down the column
Anions, gain 1 electron

Noble Gasses

Group: #18
Odorless, colorless gasses
Very Low reactivity
Don't take electrons from any one
Inner Transition Metals
Built in labs
Man made
Lots of different colors
tend to be radioactive!!!!!
Not reactive b/c man made
Random electron locations because
it doesn't matter