Alkali Metals

Hydrogen is typically not included in the family

- very soft
- low melting point and density
- Very reactive with water
- Most reactive of the metals
- One extra electron --> kicks the electron out

Lithium, sodium, potassium, cesium,
Alkaline Earth Metals

- Group #2
- Physical: Shiny, silvery white, low density, low melting/boiling points
- Reactivity: second most reactive family
- Ion: loose 2 electrons and form + ions with a +2 charge.

Transition Metals

- Group 3-12
- Physical: High density, High melting/boiling point
  - Hard and Shiny
  - Ductile: bend and not break
  - Conduct electricity
- Less reactive than alkali
- Ion formation: no specific #
- All are Cations (lose electrons)
Metalloids

- Group: elements from groups 13-16
- Physical: very different, not similar to one another
  - Conduct electricity: Silicon and Germanium
  - Some are not malleable (ductile).
- Reactivity: do not react with other metals
- Ion formation depends on the atom:

Non-Metals

- Group: 14-16
- Physical: not metal-like
  - Poor conductors of electricity
  - Low elasticity
  - High ionization energy and electronegativity
- Reactivity: Highly volatile = not stable
- High ionization energy
**Halogens**

Group # 17

Non-metallic  Toxic when in their pure form

Highly reactive  (Florine is the MOST REACTIVE ELEMENT)

Anion  -1 charge

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**Noble Gasses**

Colorless

Odorless

Low reactivity

Inert = unreactive
Inner Transition Metals

All Metals
Many are man made
All radioactive
BUT pretty non-reactive
tend to loose electrons (cations)
Examples
Lanthanum and Uranium

What could quiz you on?

- examples of elements from each group
- ID'ing the numbers on the periodic table
  - difference between the atomic mass and the mass number
- ID'ing the element from # of protons ect
- Definitions on the green foldable
  - Isotopes and Ion's (draw them)
- How to draw an atom
- Characteristics of families
May 24, 2016