

Elements and their Properties



<http://www.periodictable.com>

Metals

- **Discovery**
(6000 yrs ago)

1st - _____
 2nd - _____
 3rd - _____
 4th - _____
 5th - _____



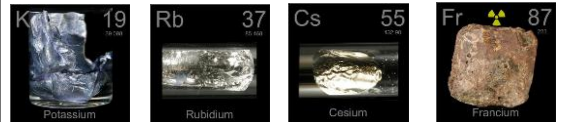
Characteristics of Metals

- _____ of heat and electricity
- _____ -reflect light (shine)
- _____ -can be hammered into sheets
- _____ -Shaped into wires



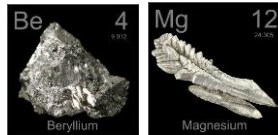
Types of Metals

- _____ Metals
- Group _____
- _____ metal
- Most _____ of all metals
- _____ - extremely rare and the most reactive metal



_____ Metals

- Group _____
- Make spectacular _____



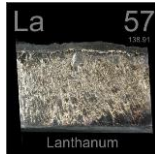
Transition Elements

- Group _____
- Considered to be in "_____"
- Most familiar metals-occur in nature as _____ (not in a compound form)



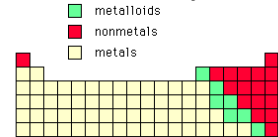
Inner Transition Metals

- 58-71
- Follow Lanthanum
- 90-103
- Follow Actinium
- _____ and _____



Non-Metals

- Found to the _____ of the “_____” line except for _____
- Usually _____ or _____
- Not _____ or _____
- Don't _____ heat or electricity



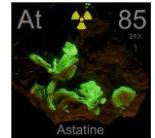
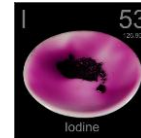
Hydrogen

- _____ -2 atom of the same element bonded together
- Most hydrogen on earth is found in _____.
- Hydrogen as an atom is very _____.



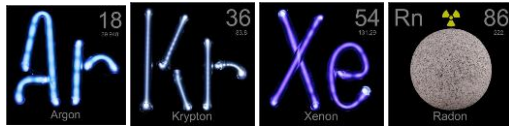
Halogens

- Group _____
- _____ valence electrons
- _____ most chemically active of all elements



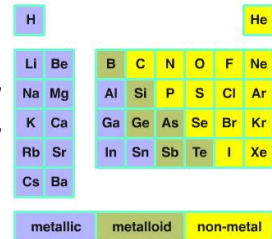
Noble Gases

- Very _____
- Energy levels are “_____”
- _____ valence electrons



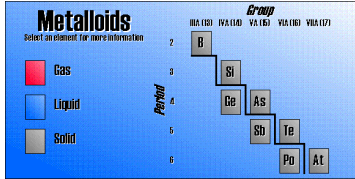
Mixed Groups

- Groups _____
- Contain _____
- _____
- _____
- and _____



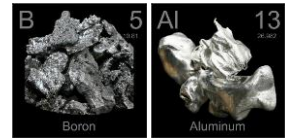
Metalloids

- Stair-step line (except _____)
- Share unusual characteristics
- Can have both _____ and _____ properties



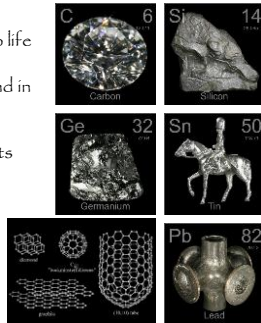
Boron Family

- Group _____
- _____ is the most abundant metal in Earth's crust
- _____ Valence electrons



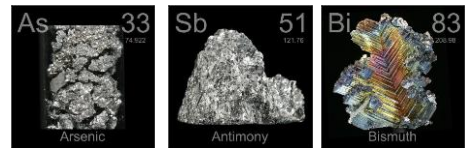
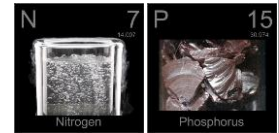
Carbon Family

- Group _____
- _____ is essential to life
- _____ is second in abundance in Earth's crust.
- _____ conducts electric current under certain conditions.
- _____ the same element has different molecular structures



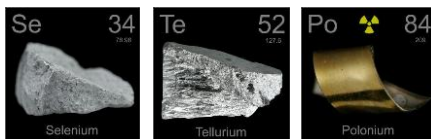
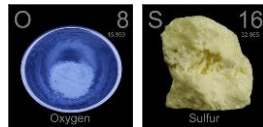
Nitrogen Family

- Group _____
- _____ Valence electrons
- _____ is the 4th most abundant element in your body



Oxygen Family

- Group _____
- _____ Valence electrons
- Oxygen is found _____ (O_2)



Synthetic Elements

- Elements having more than _____ protons
- _____ in labs
- _____ atoms
- Mixed groups
- _____ - Element 118 was discovered (it's life is 0.66 milliseconds)

