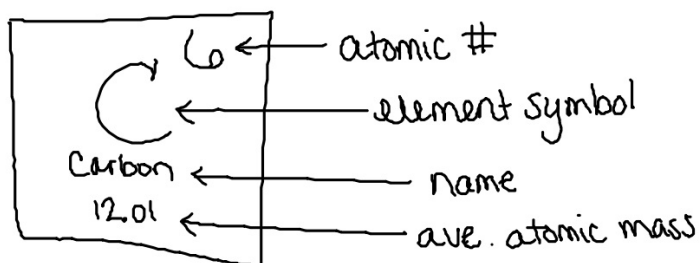


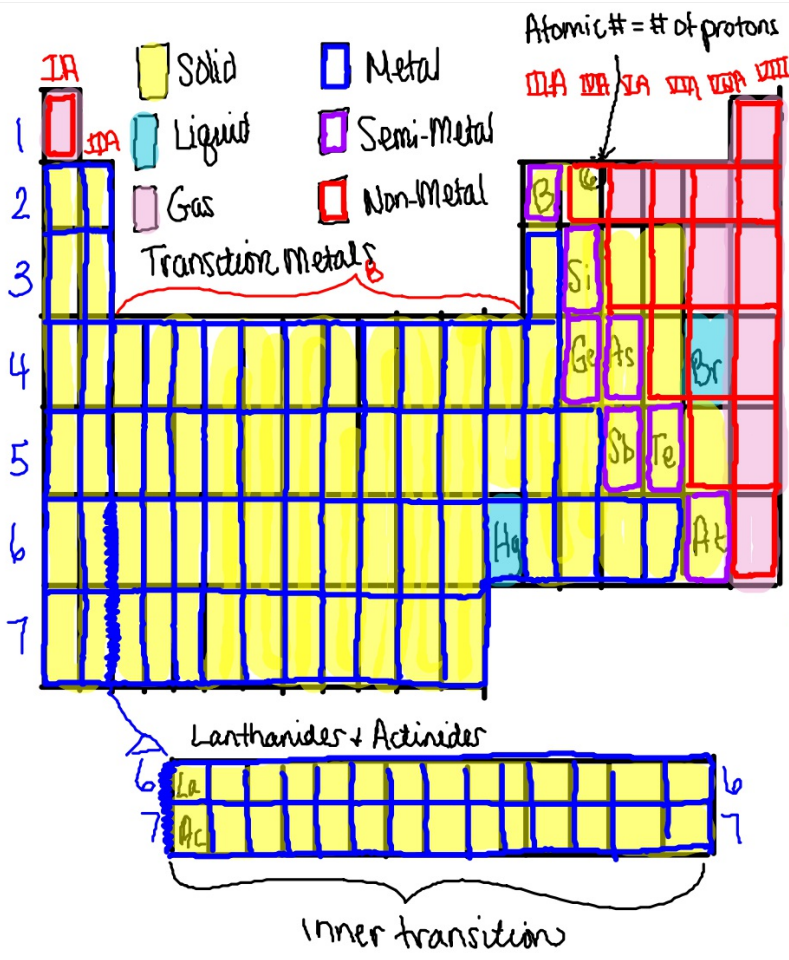
11/7/14

## Periodic Table:

D. Mendeleev - created the 1<sup>st</sup> periodic table based on increasing atomic mass, He was able to leave spaces for elements yet undiscovered.

H. Moseley - Modern Periodic Law - placing elements in order of increasing Atomic # (# of protons) - elements behavior is a result of their atomic #.





Group A = # of e<sup>-</sup> on the  
 (used to find charge) Valence

Periods = # of energy levels

Families (↓): groups of  
 atoms w/ similar characteristics

Group IA = Alkali metals -  
 most reactive metals

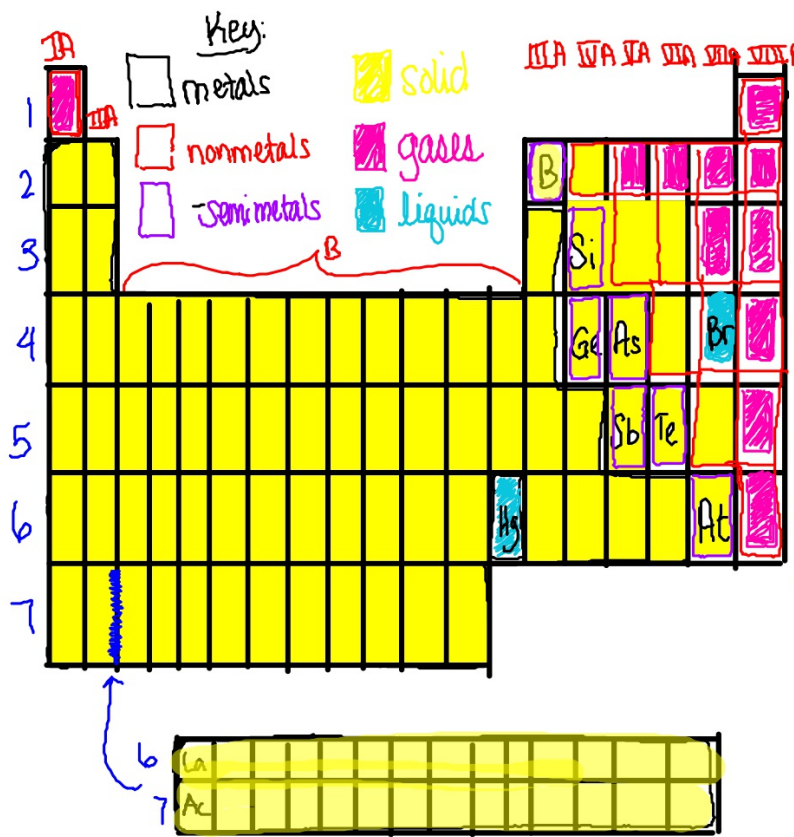
IIA = Alkaline Earth Metals  
 Very reactive metals

Transition + Inner  
Transition have  
 incomplete filling of the  
 energy levels.

VIIA - Halogens  
 most reactive non-metals

VIIIA - Noble Gases  
 unreactive





groups: # valence e<sup>-</sup>  
(from this calculate the charge)

periods: # of energy level

Families (Specialty Groups)

- IA - alkali metals  
very reactive metals
- IIA - alkaline earth metals  
reactive metals
- B - transition metals
- Lanthanides - inner transition (row 6)
- Actinides - inner trans. (row 7)
- VIIA Halogens - Most Reactive Non-metal
- VIIIA Noble Gases - unreactive

