

Periodic Table	
Atomic Number	Proton #
Atomic Mass	Proton + Neutron

Periodic Table Groups	
Alkali Metals	Li, Na, K, Rb, Cs, Fr
Halogens	F, Cl, Br, I, At
Metals	
Rep Metals	
Noble Gas	

Electron Configurations	
Short Hand	Last Configuration (EnergyLevel)(Orbital)(Orbital Shape)
S	2
P	6
D	10
F	14
	1S
	2S 2P
	3S 3P 3D
	4S 4P 4D 4F
	5S 5P 5D 5F
	6S 6P 6D
	7S 7P
Hint: Group 1-2 & Helium	= S
Hint: Group 3-12	= D
Hint: Group 13-18	= P
Hint: Bottom 2 Rows	= F
D=	1# below S
F=	2# below S
D=-1	
F=-2	

Electron Configuration Short-Hand	
Step 1:	Locate Element
Step 2:	Find Noble Gas comes before & Bracket
Step 3:	Count Normally from there

Determine Atomic Weight	
Throughout	Sig Fig
Step 1	Mass X Abundance
Step 2	Repeat Step 1
Step 3	Add both

State Hands Rule	
State Hand's Rule	Electron Orbital Fill
Fill	Lowest First
Arrows	opposite direction

Principle Energy	
First Level	S: Max 2
Second Level	S,P: 2+6= Max 8
Third Level	S,P,D: 2+6+ 10 = Max 18
Fourth Level	S,P,D, F: 2+6+ 10 + 14= Max 32

Electron Affinity	
Electron Affinity	Chance of picking up Electron

