

Atomic Structure Tutorial Worksheet

1. Complete the information in the table below for the first twenty (20) elements of the periodic table.

Element Symbol	H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar	K	Ca
Mass # (round to whole # except Cl)							14	16				24	27				35.5	40	39	40
Atomic #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
# of protons																	17			
# of electrons															15	16	17	18		
# of neutrons (mass # - atomic #)													14				18			20
Electronic configuration of atom					2,3					2,8	2,8,1						2,8,7		2,8,8,1	
How many electrons does the element need to be stable? (Write 0 if already stable)	1				5	4				0	7			4			1			6
Will the element prefer to lose or gain electrons to form ions? (Write L for lose and G for gain)	L/G	n/a			n/a	n/a		G		n/a				n/a				n/a	L	
Ion Symbol	H ⁺ /H ⁻	n/a			na	n/a		O ²⁻		n/a				n/a				n/a		