

Describe the structure of atoms, including the masses, electrical charges, and locations of protons, neutrons, and electrons.

Identify that protons determine an element's identity.

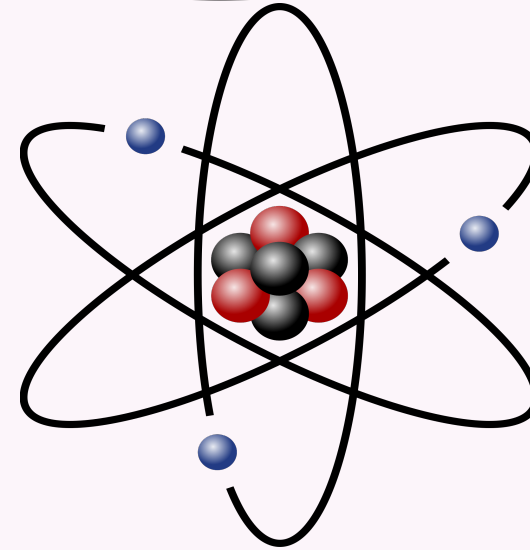
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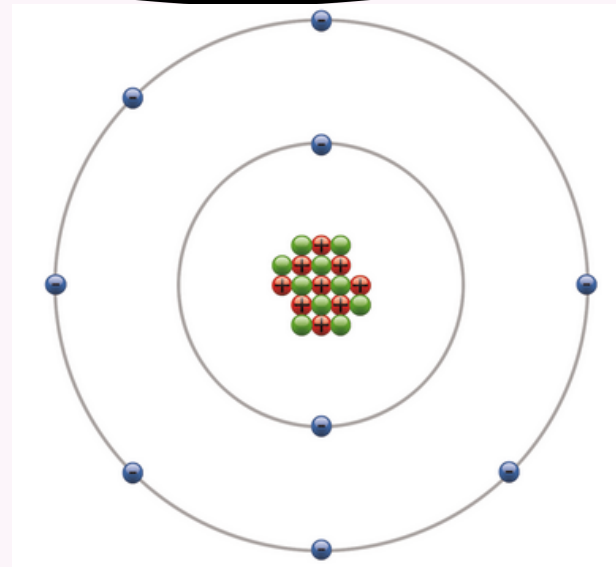
I CAN describe the structure of atoms, including the masses, electrical charges, and locations of protons, neutrons, and electrons.

I CAN identify that protons determine an element's identity.

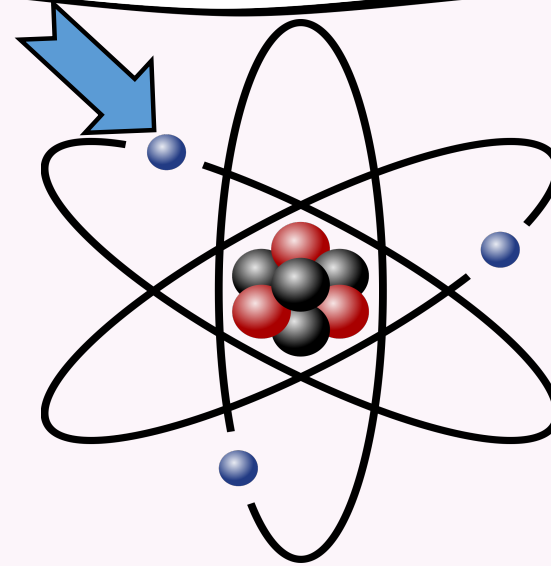
Atom



Structure



Electron



Electrical Charge



Electron (negative charge)



Proton (positive charge)



Neutron (no charge)

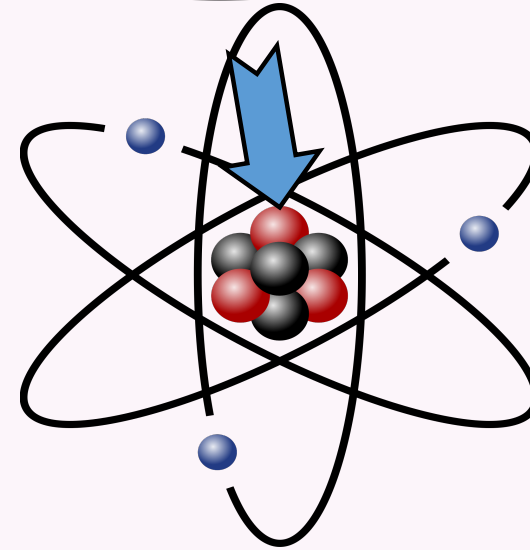


Attraction

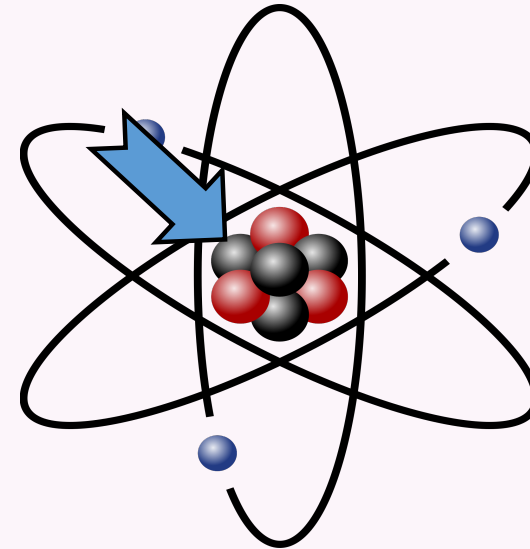


Repulsion

Proton



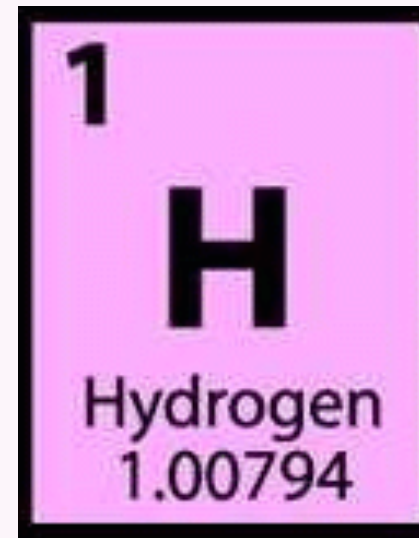
Neutron



**Atomic
Mass #**

**Protons +
Neutrons**

Element



Periodic Table

Group

I II III IV V VI VII VIII

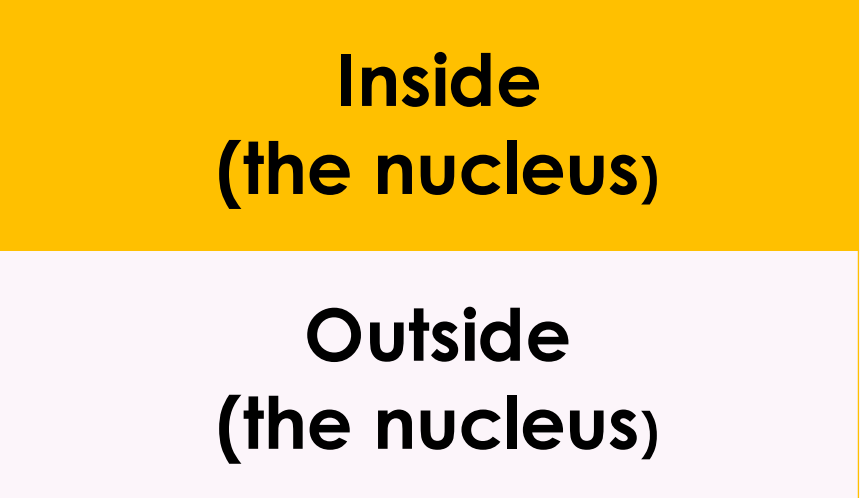
Period

1 2 3 4 5 6 7

* Lanthanides

** Actinides

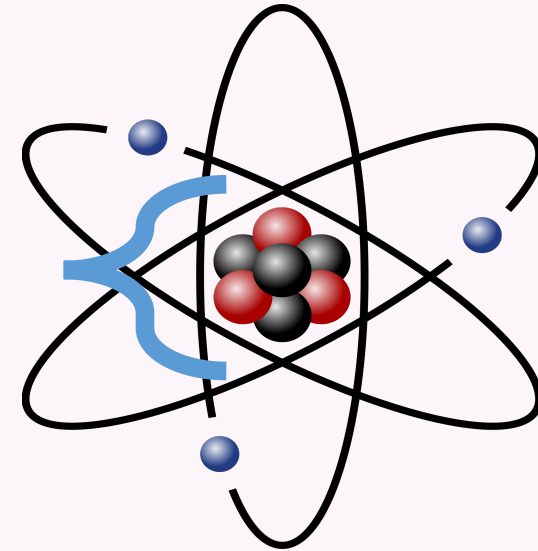
Location



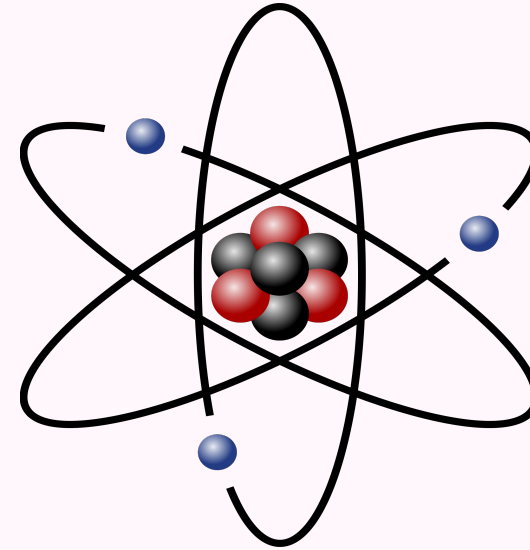
Atomic Number

Same as
Number of
Protons

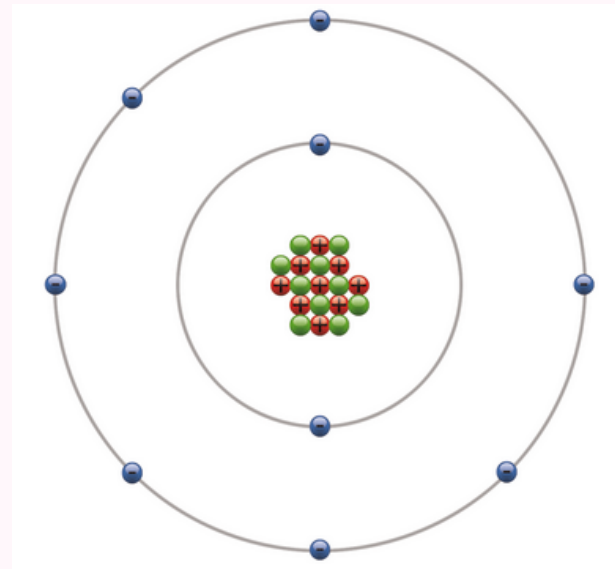
Nucleus



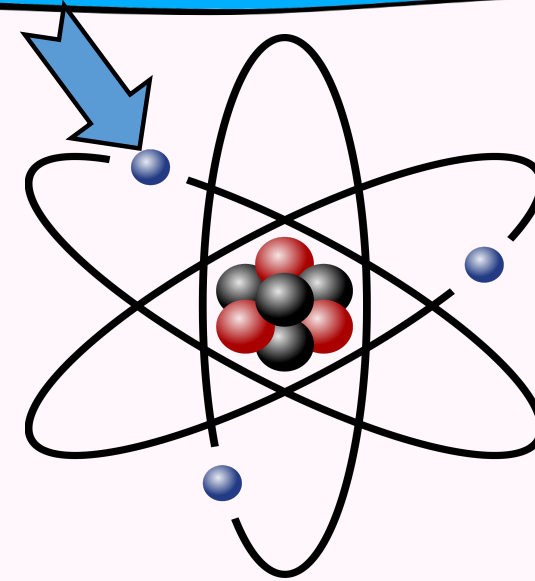
Atom



Structure



Electron



Electrical Charge



Electron (negative charge)



Proton (positive charge)



Neutron (no charge)



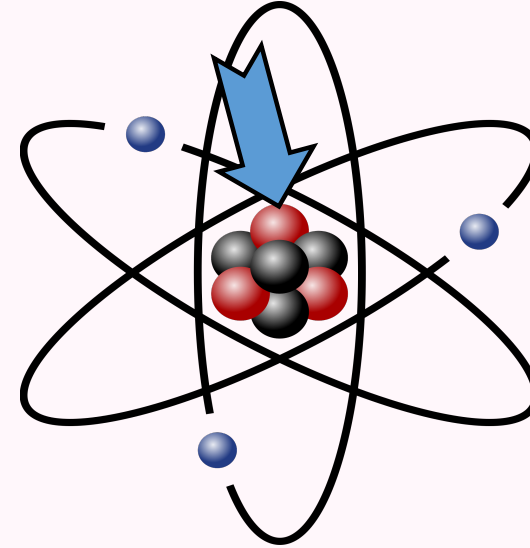
Attraction



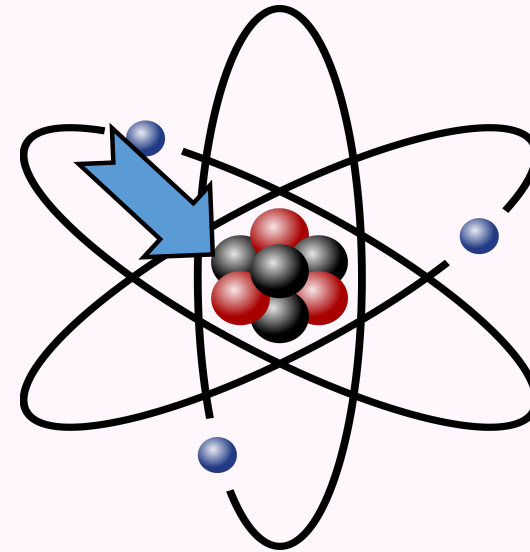
Repulsion



Proton



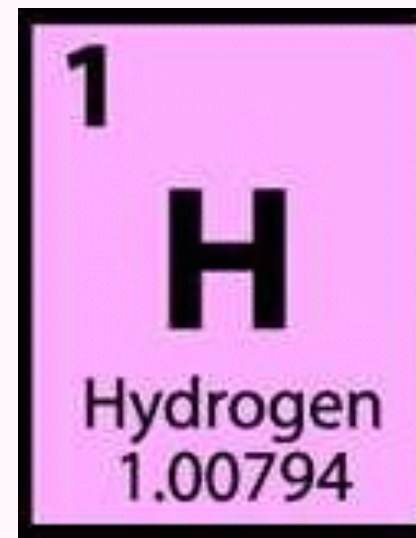
Neutron



**Atomic
Mass #**

**Protons +
Neutrons**

Element



		Group																									
		I	II																	III	IV	V	VI	VII	VIII		
Period	1	1 H																								2 He	
	2	3 Li	4 Be																			5 B	6 C	7 N	8 O	9 F	10 Ne
	3	11 Na	12 Mg																			13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
	4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr								
	5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe								
	6	55 Cs	56 Ba	*	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn								
	7	87 Fr	88 Ra	**	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Uut	114 Fl	115 Uup	116 Lv	117 Uus	118 Uuo								
* Lanthanides		57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu											
** Actinides		89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr											

Inside (the nucleus)

Outside (the nucleus)

Atomic Number

Same as
Number of
Protons

Nucleus

