

ATOMIC Theory

- ATOM - Democritus
- Dalton
- Thomson - founder CRT
 - cathode \ominus pole, \oplus Anions
 - Anode \oplus pole, \ominus Anions.
- Rutherford. Alpha ^4_2He at Gold foil
 - \hookrightarrow mostly empty space


Plum Pudding

Oct 22-9:19 AM

Nucleus - SOLID, really small

\hookrightarrow P + n

At # $(P+n) = \text{At mass}$

$\#e^- = \#p$  NOT an ion

Ion $\Delta \#e^-$

Add $e^- \Rightarrow \ominus$ ion Anion

lose $e^- \Rightarrow \oplus$ ion cation.

Selected oxidation state

Oct 22-9:43 AM

$\Delta Z \neq 0 \rightarrow$ new element.

$\Delta Z = 0$ Same element, different mass

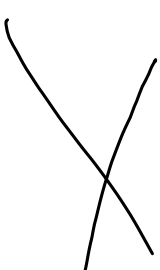
Mass \rightarrow ~~#P + #N~~

At # \rightarrow #P

$^{17}_8\text{O}^{2-}$

8p, 9n, 10e⁻

Ion and an Isotope



Oct 22-9:47 AM

BOHR $2n^2$

2-8-18-32

Na 2-8-1

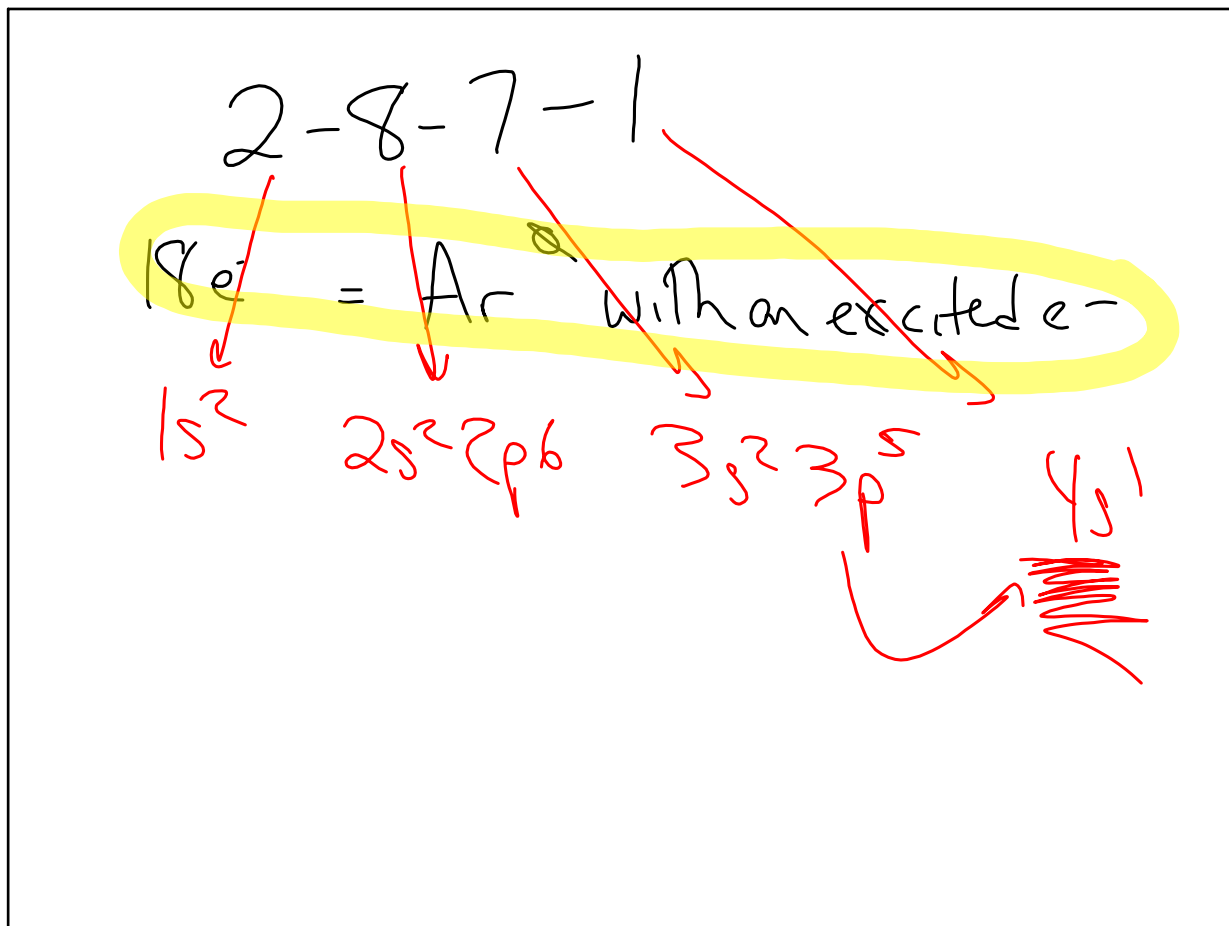
excited e⁻ for Na 2-8-0-1

Na?

He⁻ = //p

He⁻

Oct 22-9:50 AM



Oct 22-9:52 AM