Learning Target 2.4

Unit to quest (long quiz/short test) is Thursday on LT 2.0, 2.2, 2.3 and 2.4

Get out your notebook answer the following

Rb: p = 37
n = 85 - 37 = 48
e = 37

Fe^{+2}: p = 26
n = 56 − 26 = 30
e = 26 − 2 = 24

Write the electron configurations for the following

S^{-2}: $1s^2 2s^2 2p^6 3s^2 3p^4$
S: [Ne] $3s^2 3p^4$ $p^+ = 16$ $e^- = 16$
S^{-2}: [Ne] $3s^2 3p^6$ $p^+ = 16$ $e^- = 18$

Cu^{+1}: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$
Cu: [Ag] $4s^2 3d^9$ $p^+ = 29$ $e^- = 29$
Cu^{+1}: [Ag] $4s^2 3d^8$ $p^+ = 29$ $e^- = 29$

* the type of atom (Element) is based on number of protons NOT number of electrons

Oct 7-7:59 AM

Learning Target 2.4

I can determine the number of valence electrons an atom has based on electron configuration.

Write the electron configurations of elements 3-10.

Li:

Be:

B:

C:

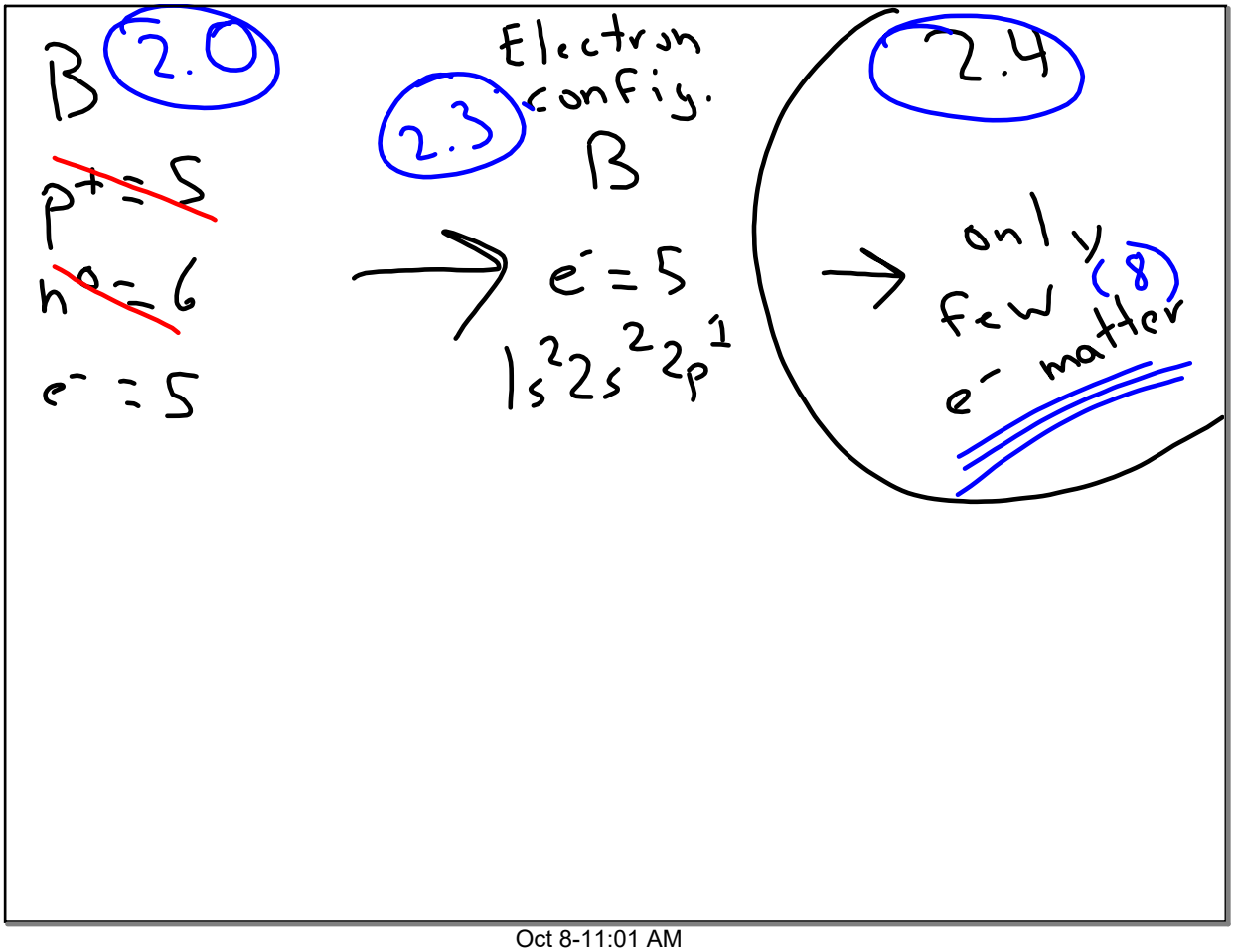
N:

O:

F:

Ne:

Oct 7-8:08 AM



Oct 8-11:01 AM

Learning Target 2.4

I can determine the number of valence electrons an atom has based on electron configuration.

Write the electron configurations of elements 3-10.

1 Li: $1s^2 2s^1$

2 Be: $[He] 2s^2$

3 B: $[He] 2s^2 2p^1$

4 C: $[He] 2s^2 2p^2$

5 N: $[He] 2s^2 2p^3$

6 O: $[He] 2s^2 2p^4$

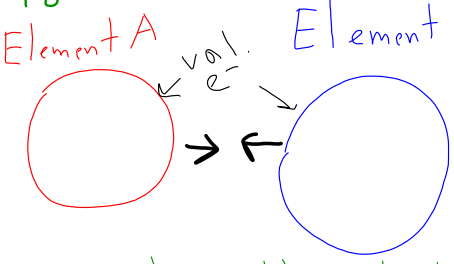
7 F: $[He] 2s^2 2p^5$

8 Ne: $[He] 2s^2 2p^6$

Ca. $[Ar] 4s^2$

Cl: $[Ne] 3s^2 3p^5$

Q: Are all the electrons in an atom important to "do" chemistry?



A: No, only the electrons in the outer s and p sublevel. (Valence Electron)

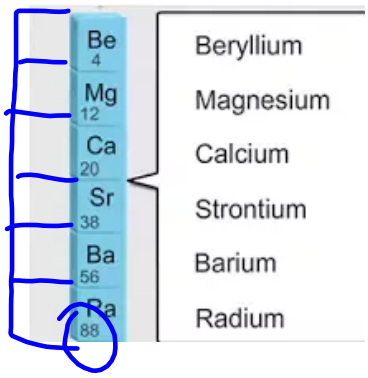
max: 8

Oct 7-8:08 AM

How is possible for different number of total electrons but have same number of valence electrons?

2 val. e⁻

s^1 s^2



$[He]2s^2$

$[Rn]7s^2$

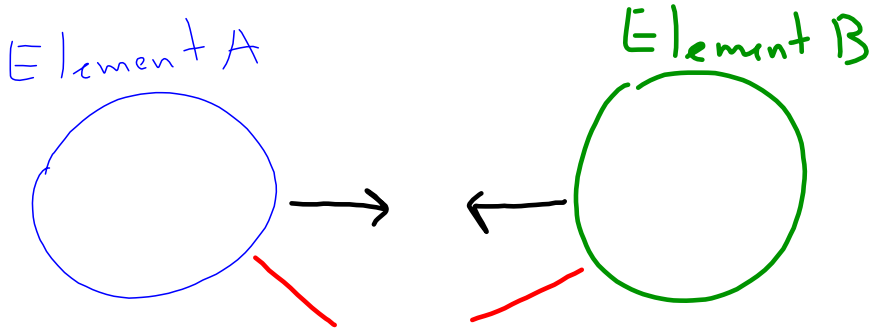
End in s^2 but different energy levels

Oct 8-8:55 AM

You will be spending the rest of the year studing max of 8 e⁻.

Oct 8-9:30 AM

The only electrons involed in "doing" chemistry are the 8 valence electrons.



Outer "Valence electrons"
max: 8

Oct 8-8:36 AM

Oct 7-8:49 AM