Name: _____

Period: _____

Ch. 18:3

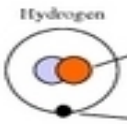
The Atom Board—Making Atoms

of protons = atomic

Protons are _____

Electrons are _____

Neutrons are _____



Protons and neutrons go in the nucleus.

Electrons are in orbits around the nucleus.

Incorrect! - neutrons belong in the nucleus with the protons.

Atomic # = protons = 1

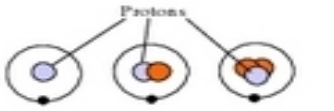
Hydrogen
1
H
1.01
1, 2, 3

Finding number of neutrons

Atomic # = number of _____

Mass # = number of _____

Neutrons = Mass # - Atomic #

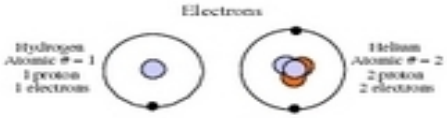


Hydrogen 1
1—1 = 0 n

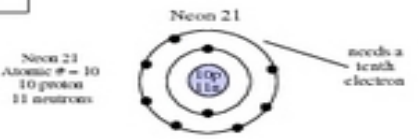
Hydrogen 2
2—1 = 1 n

Hydrogen 3
3—1 = 2 n

of electrons = # of protons



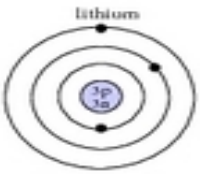
In a neutral atom there is one electron for every proton.



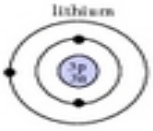
Incorrect! 10 protons attract 10 electrons. There is one electron missing.

Electrons fill up inner orbits first

So electrons will want to get as close to the nucleus as possible by filling up inner electron levels first.



Incorrect! - The electrons will fill up the inner levels first. First levels takes 2 electrons.



Correct! - Inner orbit is full (with 2); one outer electron.

by C. Stephen Murray, 2003