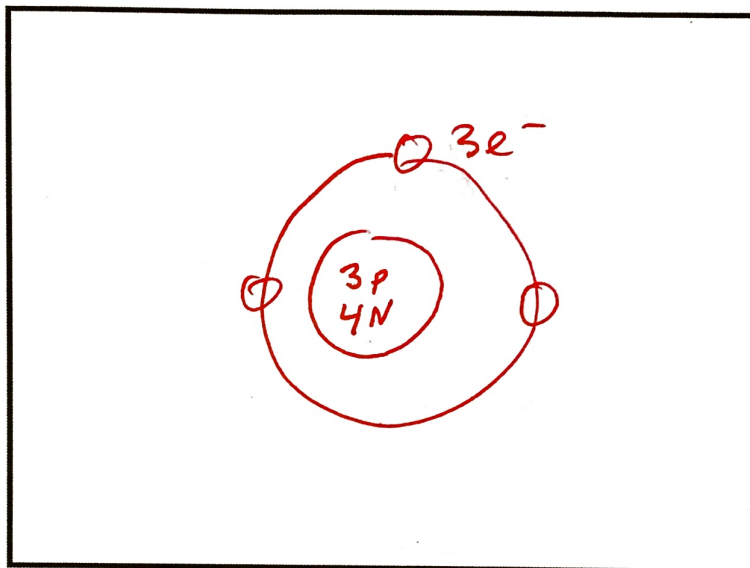


Post-lab for Build an Atom

9. You build an atom that has the following components:

- 3 protons (P)
- 4 neutrons (N)
- 3 electrons (E)

Draw a picture of how you would build your atom below:



Circle which element this atom is on this periodic table below:

H																	He
<u>Li</u>	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe

The mass of this atom is:

- f. 3 mass units
- g. 4 mass units
- h. 6 mass units
- i. 7 mass units
- j. 11 mass units

Explain what ideas you used to choose an answer:

$P + N = \text{Mass}$

The charge of this atom is:

- f. 0, this is a neutral atom
- g. -3
- h. -1
- i. +1
- j. +3

10. You start with your atom: 3 protons
4 neutrons
3 electrons

You want to change your atom's properties.

Mark YES if a change will work, and mark NO if it will not work.

a. Hydrogen, Helium, Lithium, Beryllium, Boron, Carbon are all different elements.

If you want to **change the type of element** your atom is, you can either:

(circle)
Add a proton Yes or No
or Add a neutron Yes or No
or Add an electron Yes or No

Explain the ideas you used to choose your answer:

Protons I.D. the Atom

b. If you want to **change the charge** of your atom, you can either:

(circle)
Add a proton Yes or No
or Add a neutron Yes or No
or Add an electron Yes or No

Explain the ideas you used to choose your answer:

$p = +$ Neutrons have NO effect
 e^-

c. If you want to **change the mass** of your atom by 1 or more mass units, you can either:

(circle)
Add a proton Yes or No
or Add a neutron Yes or No
or Add an electron Yes or No

Explain the ideas you used to choose your answer:

e^- have NO mass

d. If you add 1 proton and 1 neutron to your atom ...

Will the element change? Y If so, circle the new element?

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe

Will the mass change? Y If so, what is the new mass of the atom? 9

Will the charge change? Y If so, what is the new charge of the atom? +1