Name: _____

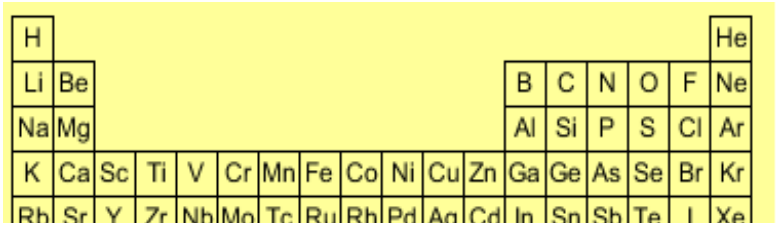
Chemistry: Atomic Structure Discovery Activity – Post Lab Questions

1) You build an atom that has the following components:

3 protons
4 neutrons
3 electrons

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

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



The mass of this atom is:

a. 3 mass units
b. 4 mass units
c. 6 mass units
d. 7 mass units
e. 11 mass units

Explain what rule you used to choose an answer:

The charge of this atom is:

a. 0, this is a neutral atom
b. -3
c. -1
d. +1
e. +3

Explain what rule you used to choose an answer:

2) You build a new atom that has the following components:

5 protons
4 neutrons
5 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. 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 rule(s) you used to choose your answer:

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 rule(s) you used to choose your answer:

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 rule(s) you used to choose your answer:

D. If you **add 1 proton and 1 neutron** to your atom …

Will the element change? ____ If so, what is the new element? _____

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

Will the charge change? ____ If so, what is the new charge of the atom?_____