



Diagramming Atoms Worksheet

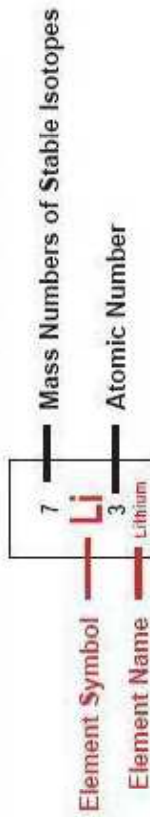
Name _____ Date _____ Period _____

1. Explain the contribution to the scientific community made by each individual listed below:
 - a.) John Dalton
 - b.) J.J. Thompson
 - c.) Ernest Rutherford
 - d.) Niels Bohr
2. Name the 2 main particles found in the atomic nuclei and state the charge of each.
_____ have a _____ charge and _____ have _____ charge.
3. Electrons (outside nucleus) have very little mass and they have a _____ charge.
4. The atomic number is the number of _____ in the nucleus of an atom.
5. The mass number is the number of _____ and _____ in the nucleus.
6. Isotopes of an element have different numbers of _____ but have the same number of _____ and electrons.
7. Atoms have particles with both (-) and (+) charges, explain why atoms have no net charge.
8. The mass of a proton is _____ Atomic Mass Unit
9. The mass of a neutron is _____ Atomic Mass Unit
10. An electron's mass is about 1/1800 AMU, so we assume its mass is _____.
11. What must atoms do to become stable? _____.
12. To fill their outer (valence) shell atoms may _____ or _____ electrons.
13. Which Group of elements (from the back page) are inert?(valence energy level already full)

Name _____

Group 18

1. Using a Periodic Table of Elements, Draw a diagram of each atom, in the space provided. Use P+, N and show e- in proper energy levels.



Group 1	Group 2	Group 13	Group 14	Group 15	Group 16	Group 17	Group 18
Hydrogen	Beryllium	Boron	Carbon	Nitrogen	Oxygen	Fluorine	Helium
Lithium	Magnesium	Aluminum	Silicon	Phosphorus	Sulfur	Chlorine	Neon
Sodium	Calcium						Argon
Potassium							

Period 1

Period 2

Period 3

Period 4

2. What is similar about all elements in Group 1?

3. What is similar about all elements in Group 2?

4. What is similar about all elements in Group 18?

5. Group 2 elements will combine the elements in which Group? Explain Why!