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 _____.

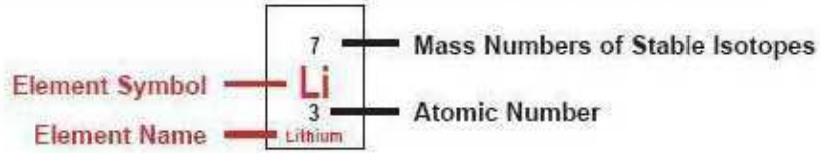
11. What must atoms do to become stable?_____.

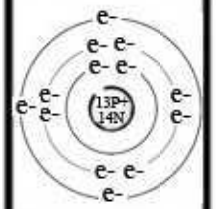
12. To fill their outer (valence) shell atoms may_____ or _____ electrons.

13. Which Group of elements (from the back page) are inert?(valence energy level already full)

Name_____

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
Period 1	Hydrogen							Helium
Period 2	Lithium	Berylium	Boron	Carbon	Nitrogen	Oxygen	Fluorine	Neon
Period 3	Sodium	Magnesium	Aluminum 	Silicon	Phosphorus	Sulfur	Chlorine	Argon
Period 4	Potassium	Calcium						

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!_____

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