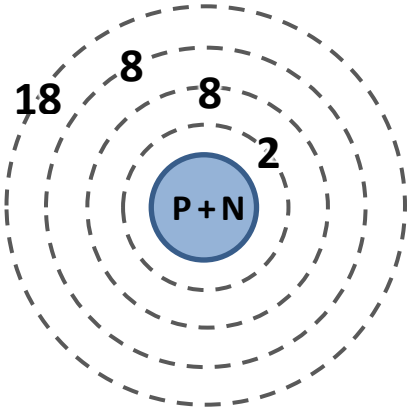
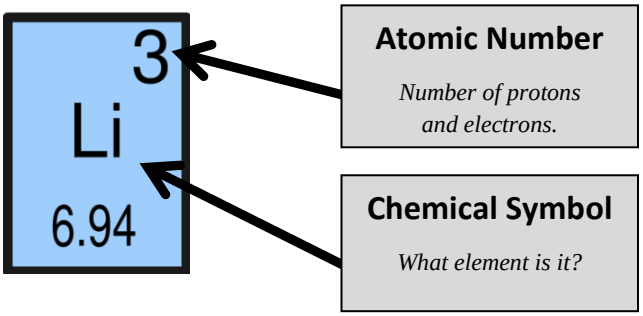
Name: _____ Class: _____ Date: _____

Protons and Electrons

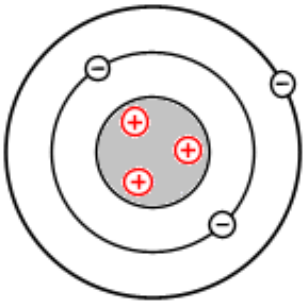
Protons – positive particles located in the nucleus

Electrons – negative particles located in orbiting shells





A Model of a Lithium Atom:



Class Example:

(Diagram the protons and electrons in a Carbon atom, below.)

Use your knowledge of the Periodic Table to unscramble the message. Write the full chemical symbol (either one or two letters) in the correct spaces below.

_____ _____ _____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ A _____!

1. This element has a 4th shell that is ALMOST full.
2. This element has 92 total electrons.
3. This element has 49 protons.
4. This element has one more proton than Phosphorus.

5. This element has 34 protons.
6. This element has 15 electrons in its 4th shell.
7. This element is the <u>smallest</u> element that has 6 electrons in its outer shell.
8. This element has one fewer electron than the element above in Question 7.

9. This element is just a tiny bit smaller than Xenon.
10. This element has 6 electrons in its third shell.

11. This element is used in nuclear reactors; it has 184 protons and electrons (added together).
12. This element has twice as many protons as Zinc.
13. This element has an atomic mass of 167.26

14. This element has one fewer electron than Rhenium.
15. The first letter in the alphabet.
16. This element is medium-sized and has 3 electrons in its fifth shell.