

## The Mystery Element

Name \_\_\_\_\_

Follow the clues to find the identity of the mystery element...

I promise to do my own work on this mission and not cheat off anyone else for fear of losing my pinky toes \_\_\_\_\_

Signature of above mentioned

- 1.) Take the atomic number of an atom of lithium and add the number of protons in a fluorine atom. \_\_\_\_\_
- 2.) To your answer in step #1, add the number of electrons in an atom of cadmium. \_\_\_\_\_
- 3.) Divide your answer in #2 by the number of neutrons in an atom of boron with a mass number of 11. \_\_\_\_\_
- 4.) Take the number that you get in #3 and multiply by the number of electrons in a sodium ion with a +1 charge. \_\_\_\_\_
- 5.) Subtract the number of protons in an atom of calcium from your answer in #4. \_\_\_\_\_
- 6.) Take your answer in #5 and divide by the number of electrons in a fluorine ion with a -1 charge. \_\_\_\_\_
- 7.) Divide your answer from #6 by the number of neutrons in an atom of carbon-14. \_\_\_\_\_
- 8.) Next, take that number from #7 and add the number of protons in an atom of copper. \_\_\_\_\_
- 9.) To that number, subtract the number of neutrons in an atom of oxygen. (round) \_\_\_\_\_
- 10.) To your answer from #9, add the number of protons of an atom that has 4 more protons than an atom of potassium. \_\_\_\_\_
- 11.) Divide that answer by the atomic number of plain old boring boron. \_\_\_\_\_
- 12.) To that answer, add the number of neutrons in an isotope of Nitrogen-13. \_\_\_\_\_
- 13.) To your answer in #12, add the number of protons in an atom of astatine. \_\_\_\_\_
- 14.) Add the number of electrons in an atom of hydrogen from your answer in #13. \_\_\_\_\_
- 15.) What is your mystery element? \_\_\_\_\_ / atomic # \_\_\_\_\_

Bonus: What does this element have to do with the periodic table? Hint: It's in the name!!!!!! \_\_\_\_\_