

# Atom Drawing Assignment

Name \_\_\_\_\_

Hour \_\_\_\_\_

Date \_\_\_\_\_

## Ch. 6 Chemistry of Life NOTES

### Atom Notes

Atoms have 3 parts

1. +Protons-in the nucleus
2. Neutrons-in the nucleus(no change)
3. -Electrons-in energy levels around nucleus
  - a. 1<sup>st</sup> energy level holds only 2 electrons
  - b. 2<sup>nd</sup> energy level holds only 8 electrons
  - c. 3<sup>rd</sup> energy level holds only 18 electrons
  - d. 4<sup>th</sup> energy level holds only 32 electrons

### Element Notes

- \*92 Natural
- \*25-Essential to living organisms
- \*Represented by symbols
- \*C,H,O,N-96% of the mass of a human
- \*Figure 6.1 pg. 146 Human Body
- \*Appendix D. Periodic Table

-How do I figure out the # of protons & electrons?

- # of protons and # of electrons is equal
- Atomic # = the # of protons = # of electrons
- Example-Carbon...Carbon's atomic # is 6...a Carbon atom has 6 protons and 6 electrons

-How do I figure out the number of neutrons?

- Take the atomic weight (round) subtract Atomic #
- Example- Carbon's Atomic weight is 12 and the atomic # is 6... $12-6=$  the number of neutrons..6

**Atom Assignment**-Draw **5** different atoms. Use the Periodic Table in Appendix D in the back of your book. For each atom drawing you must provide the atomic number, atomic weight, number of protons, number of neutrons, and the number of electrons. Each atom drawing should have the correct # of protons and neutrons in the nucleus as well as the correct # of electrons in the energy levels.

### Remember!!!

# of protons = # of electrons = atomic number

Atomic weight - atomic number = # of neutrons

### Example \*Fluorine

Atomic # is 9

Atomic weight is 19 (round atomic weight)

Protons = 9 (same as atomic #)

Electrons = 9 (same as atomic #)

Neutrons = 10 (atomic weight - atomic number)

\*Use colored pencils please!

⊗ Electrons

○ Protons

● Neutrons

