Name: _____

Not So "Bohr"-ing Atoms

AN INTRODUCTION TO THE BOHR MODEL

Terms to Know

Bohr Model - a simplified representation of an atom (In the Bohr Model, an atom is seen as a collection of protons, neutrons and electrons. The protons and neutrons form the nucleus, which is located at the center of the atom. The electrons are placed around the nucleus in 'shells.' The number of electrons that can be placed within a specific shell is limited.)

Compound - a substance composed of two or more elements which are chemically joined to each other, such as water (H_2O), carbon dioxide (CO_2), or table sugar ($C_{12}H_{22}O_{11}$)

Electron - a tiny particle with a negative charge which orbits an atom's nucleus

Element - any substance that cannot be broken up into simpler substances by chemical means (Currently 116 elements have been observed and are displayed on the Periodic Table of Elements. Gold, silver, iodine, oxygen and nickel are examples of elements.)

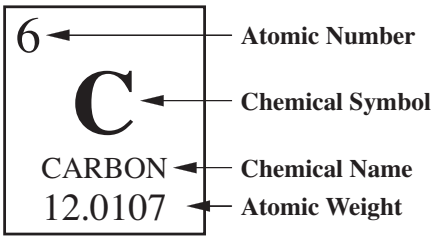
Mixture - a substance composed of two or more components which are **not** chemically joined to each other (A salad is a mixture of vegetables.)

Neutron - a neutral particle made of three quarks found in the nucleus of an atom

Nucleus - the central part of an atom, composed of protons and neutrons, which makes up 99.9% of the atom's mass

Proton - a positively charged particle found in the nucleus of an atom

How to Calculate...



Number of Protons = Atomic Number

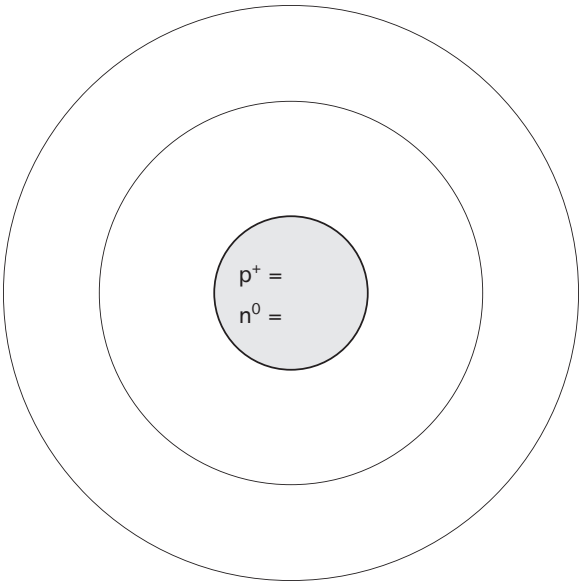
Number of Neutrons = Atomic Weight (rounded) - Atomic Number

Number of Electrons = Atomic Number

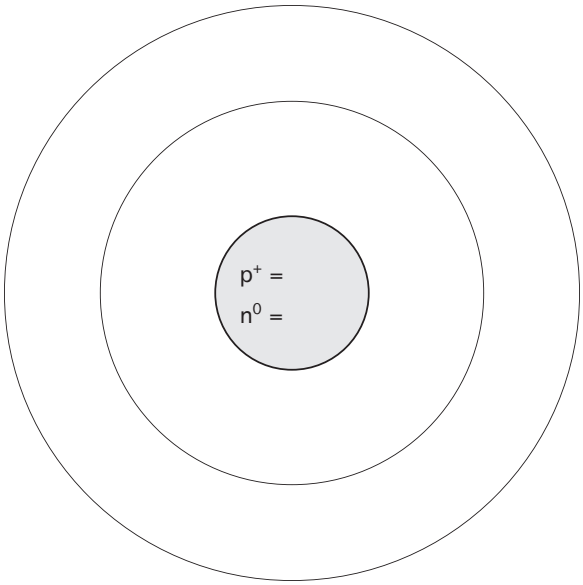
How Many Electrons Fit in the...

1st Shell (K shell)	2
2nd Shell (L shell)	8
3rd Shell (M shell)	18
4th Shell (N shell)	32

Atom #1 _____



Atom #2 _____



Mystery Atom

Atom #3 _____