## Elements and Atomic Structure

The Bohr-Rutherford model of the atom states that atoms are composed of three subatomic particles: protons, neutrons, and electrons Protons - heavy positively charged particles found in the nucleus

The # of protons = the atomic number of the Element

Neutrons - Neutral particles that have about the same mass as protons and are also found in the nucleus

# of neutrons = atomic mass - atomic number (rounded)



Electrons - Negatively charged particles with almost no mass that "circle" the nucleus at different energy levels, also called orbits or shells.

Atoms are electrically neutral, so...

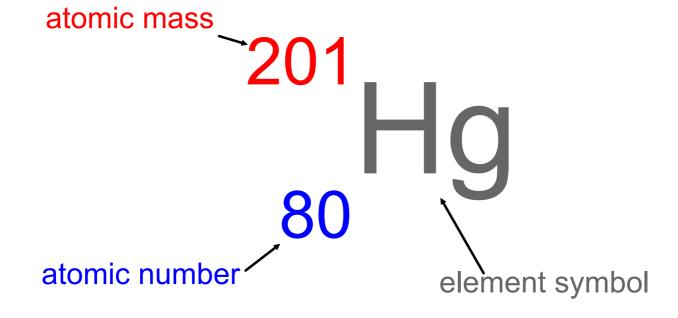
# of protons = # of electrons

## Practice make perfect!

## Find the number of protons and neutrons for the following elements:

Element	# of protons	# of neutrons	# of electrons
Lithium			
Fluorine			
Calcium			
Helium			
Argon			
Potassium			

## **Standard Atomic Notation**



**Protons, Neutrons, and Electrons** 

**Subatomic Particles Handout**