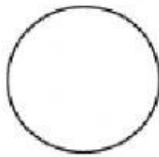
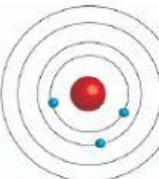
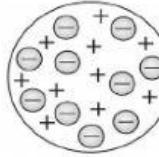


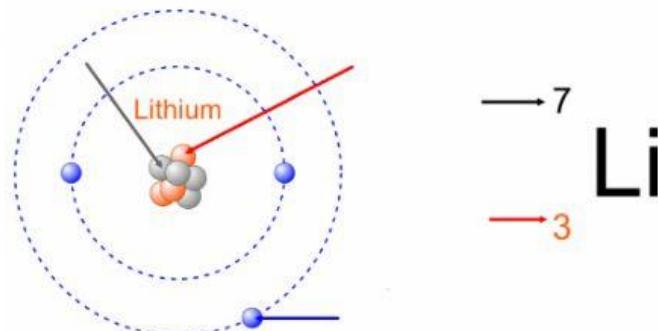
## Atomic Structure and History Basics

Match the atomic model or discovery proposed by each scientist by placing the appropriate letter in the box.    A) **Rutherford**    B) **Bohr**    C) **Thomson**    D) **Dalton**

Planetary model	
Plum pudding model	
Gold foil Experiment	
First Atomic Theory	

Label the following parts of the atom with the terms:

proton    neutron    electron    mass number    atomic number



Complete the following Tables

Subatomic Particle	Charge (+, - or 0)	Mass (amu) (1 or 0)	Location (inside or outside)
proton			
neutron			
electron			

Questions

- The number of protons is equal to the \_\_\_\_\_.  
 a. Mass number      b. Atomic number      c. the number of neutrons
- An element has the atomic number of 14. What is the element?  
 a. Nitrogen      b. Silicon      b. Phosphorus
- Isotopes have a different number of \_\_\_\_\_.  
 a. Protons      b. Electrons      c. neutrons
- Which of these atoms has the greatest number of neutrons in its nucleus?  
 a)  $^{56}_{25} \text{Mn}$       c)  $^{57}_{27} \text{Co}$   
 b)  $^{56}_{26} \text{Fe}$       d)  $^{56}_{28} \text{Ni}$

Complete the following table:

Element	Symbol	Atomic Number	No. of protons	No. of Neutrons	Mass Number	No. of electrons
	$^{35}_{17} \text{ }$	17			35	17
	$-_1 \text{H}$	1		0		
sodium	$^{23} \text{Na}$		11			
	$^{31}_{15} \text{P}$			16		