

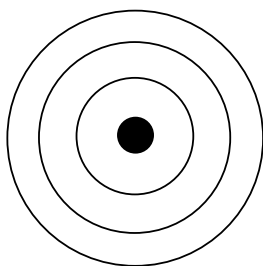
Protons and Neutrons are stuck in the _____ and determine an atom's mass, but electrons move around the nucleus and determine an atom's _____.

Electrons have _____ charge and thus are attracted to the positively charged _____ in the nucleus, which causes them to "orbit" the _____. However, the electrons can't orbit anywhere; they are confined to orbit in specific regions or _____.

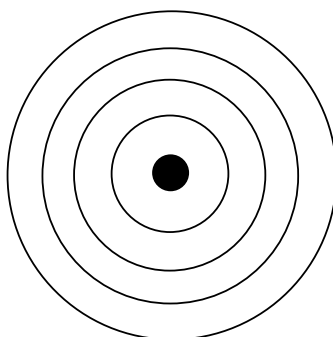
Each _____ has a maximum # of electrons that can fit "in" it:
 1st: _____ 2nd: _____ 3rd: _____ 4th: _____ 5th: _____ 6th: _____ 7th: _____

A drawing that shows this "electron configuration" is called a _____ diagram/model.

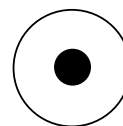
For each element, write the symbol beside the name and the total number of electrons and valence electrons ("valence #"). Then draw in the correct number of electrons for each shell. Remember, fill the shell closest to the nucleus first, but never exceed the number each shell can hold. Use your periodic table for information.



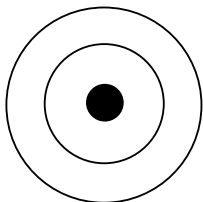
Sodium _____
 Electrons _____
 Valence # _____



Potassium _____
 Electrons _____
 Valence # _____



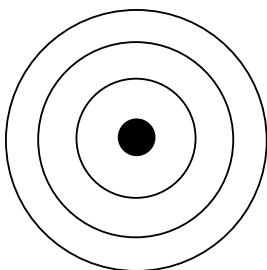
Hydrogen _____
 Electrons _____
 Valence # _____



Carbon _____

Electrons _____

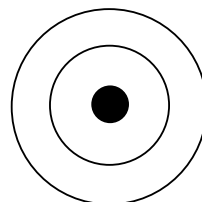
Valence # _____



Silicon _____

Electrons _____

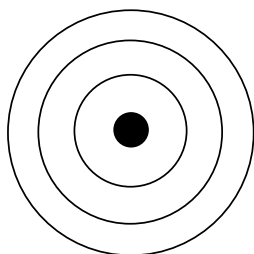
Valence # _____



Oxygen Ion _____

Electrons _____

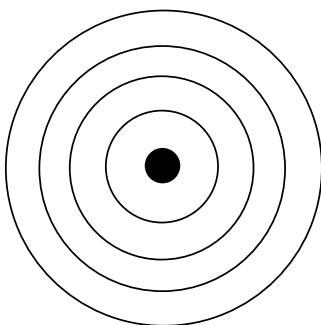
Valence # _____



Chlorine Ion _____

Electrons _____

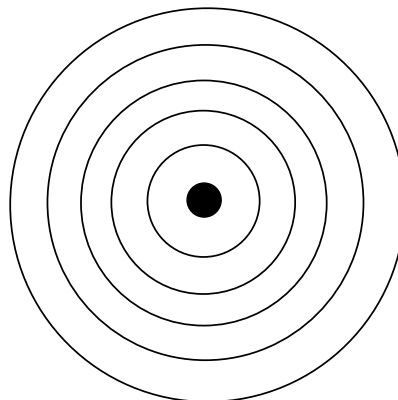
Valence # _____



Bromine _____

Electrons _____

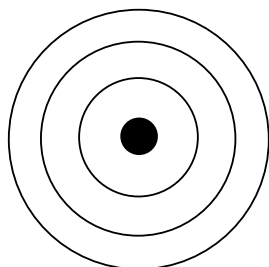
Valence # _____



Iodine _____

Electrons _____

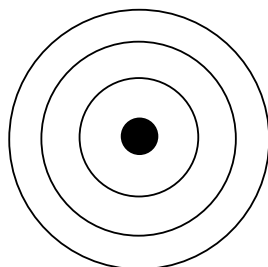
Valence # _____



Argon _____

Electrons _____

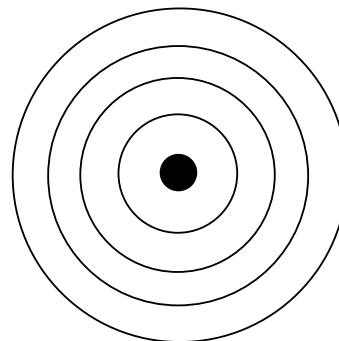
Valence # _____



Magnesium _____

Electrons _____

Valence # _____



Calcium Ion _____

Electrons _____

Valence # _____

Now, draw your own Bohr model diagrams for the following atoms. Before you make your drawing determine the number of electrons and valence # for the atom.

Lithium _____

Electrons _____

Valence # _____

Sulphur _____

Electrons _____

Valence # _____

Neon _____

Electrons _____

Valence # _____

Calcium _____

Electrons _____

Valence # _____

Krypton _____

Electrons _____

Valence # _____