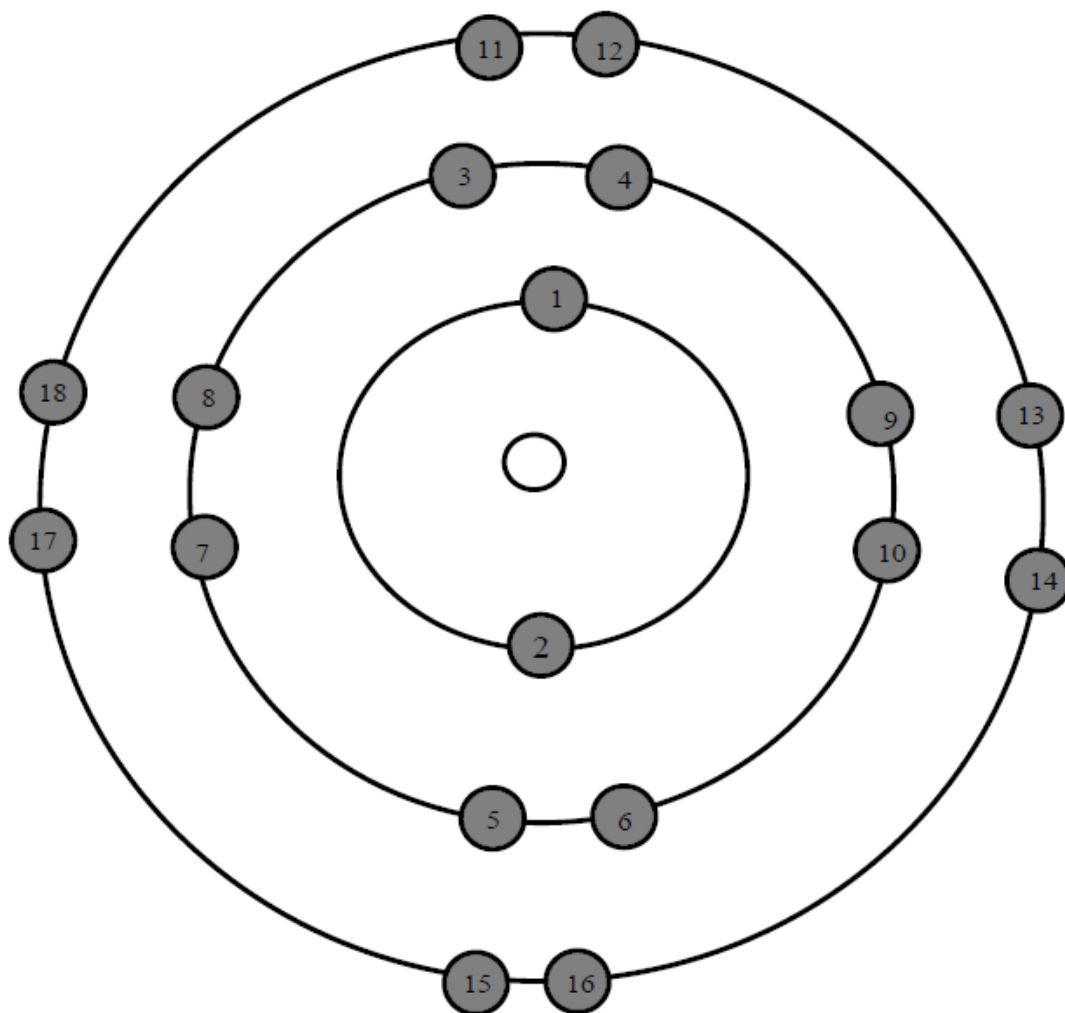


Modeling Valence Electrons



How to fill in the orbits of an atom:

1. First, figure out how many electrons an element has. To figure this out, look at the atomic number of that element. (The number of protons = the number of electrons)
2. Second, using the above picture as a guide, color in the number of electrons around the nucleus. Two electrons go in the first orbit, up to 8 electrons go in the second orbit, up to 8 electrons go in the third orbit, etc.
3. The inner electrons should be colored one color and the valence electrons should be colored a different color. Valence electrons are the electrons that are in the outer most orbit of that atom.

Bohr-Rutherford Diagrams Practice

For each element:

1. Find the element in the Periodic Table
2. Find the number of protons, neutrons, and electrons in each atom.
3. Write the element symbol in the box.
4. Draw the Bohr-Rutherford diagram. Color the inner electrons blue and the valence electrons red.

