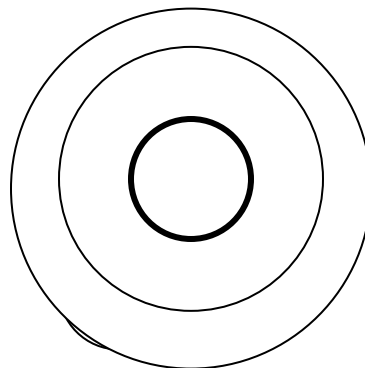
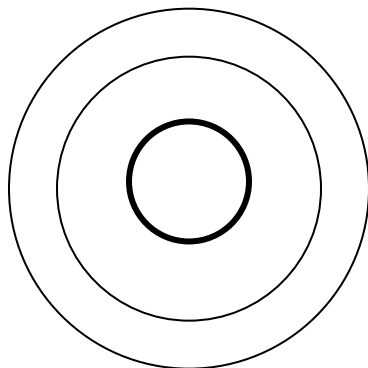
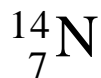
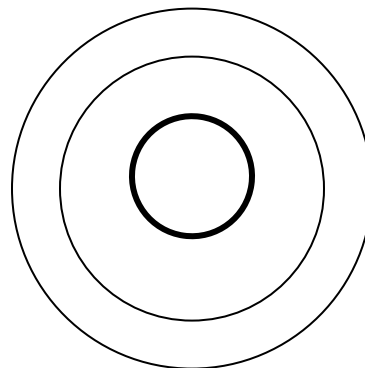
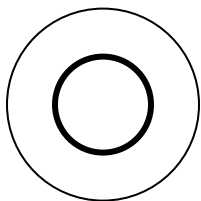


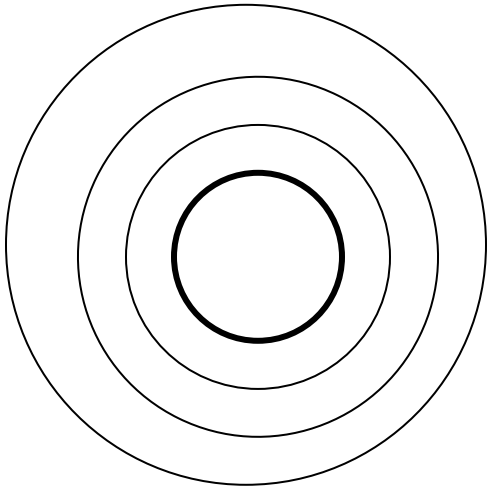
PART ONE: Atomic Structure

Using colored dots (markers) to represent protons, neutrons, and electrons, complete the following atomic models.

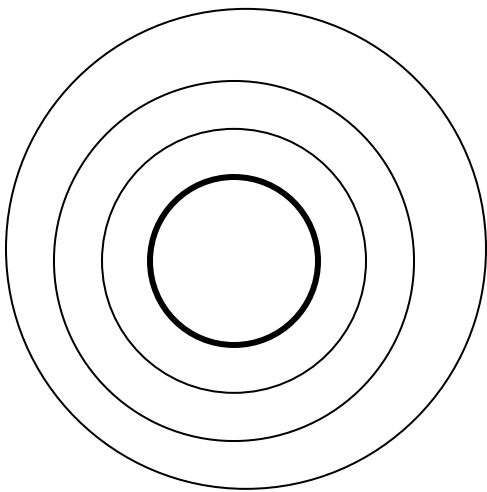
Remember:

- ✓ The 1st orbital is full with TWO electrons and the 2nd and 3rd orbitals are full with EIGHT electrons each.
- ✓ The orbitals fill up in order from the inside to the outside of the atom
- ✓ Electrons should be placed as far away from each other as possible.

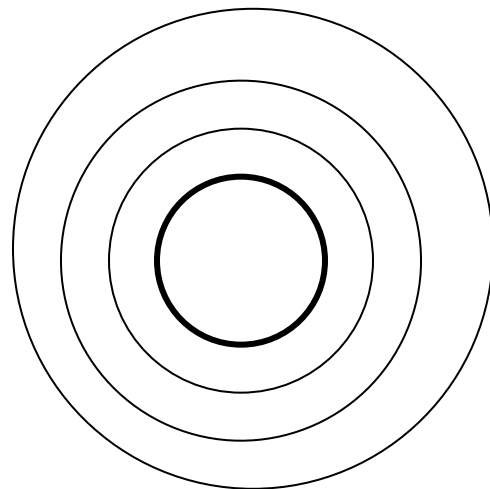




${}_{15}^{31}\text{P}$



${}_{11}^{23}\text{Na}$



${}_{17}^{35}\text{Cl}$

PART II: Using colored dots (markers) to represent protons, neutrons, and electrons, complete the following atomic models using the following to represent the bonds.

H_2O (water)

CO_2 (carbon dioxide)

O_2 (oxygen gas)

$C_6H_{12}O_6$ (glucose)

$NaCl$ (sodium chloride)

Which of the above compounds is likely to be ionic and why?