**Unit 2 EOC Concepts**

1. **Summary of orbitals part 1**—organize the following information in a chart:

|  |  |  |  |
| --- | --- | --- | --- |
| Energy level (n=) | Type of orbital | Shape of orbital | # of orbital(s) per level |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

1. **Summary of orbitals part 2**—organize the following information in a chart:

|  |  |  |  |
| --- | --- | --- | --- |
| Energy level (n=) | Type of orbital | # electrons in orbital type | Total # electrons in energy level |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

1. **Bohr Model:** make a chart or columns stating the name of the bohr’s model, picture, what was correct, and what was incorrect and what experiment it was based on on.
2. **Absorption of energy:** use two bohr models of hydrogen atom one at ground state and the other at an excited state to show an electron absorbing energy and changing energy levels
3. **Emission of energy**: use two bohr models of hydrogen atom one at ground state and the other at an excited state to show an electron emitting energy (in the form of a photon) and changing energy levels
4. **Energy comparison of shells**: using energy levels 1-4 place them in order of increasing energy
5. **Energy comparison of subshells**: place the subshells of n=3 in order of increasing energy
6. **Bohr model of an atom**: Draw the bohr model of a ground state aluminum atom
7. **Electron configuration:** draw the orbital notation, electron configuration, and noble gas configuration for a ground state phosphorous atom