

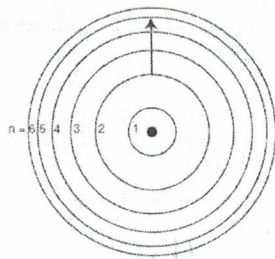
The Quantum Mechanical Model of the Atom

Name:

Period:

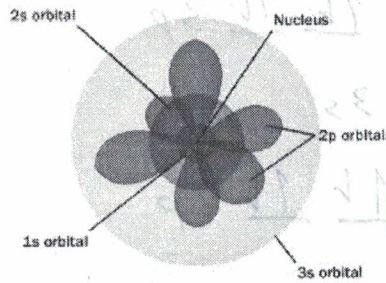
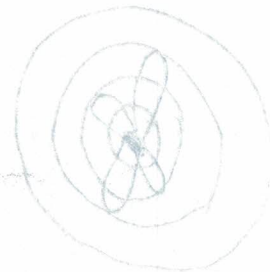
Date: 9/10/18

Bohr's Model of the Atom



- Electrons Travel in Orbital (Energy Level)
- Represents Orbitals as Circles
- Electrons Do Not Exist in Between Energy Levels

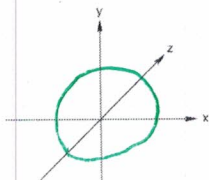
Quantum Mechanical Model



- Electron Clouds
- Identify Probable Locations of Electrons
- Not all orbitals are Circular

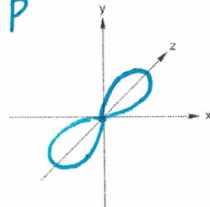
Orbitals (sub-levels)

S



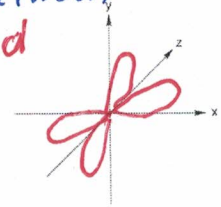
Sphere-Shaped
(2 electrons)

P



Peanut-Shaped
(6 electrons)

d

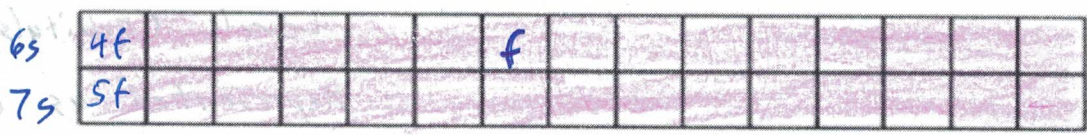
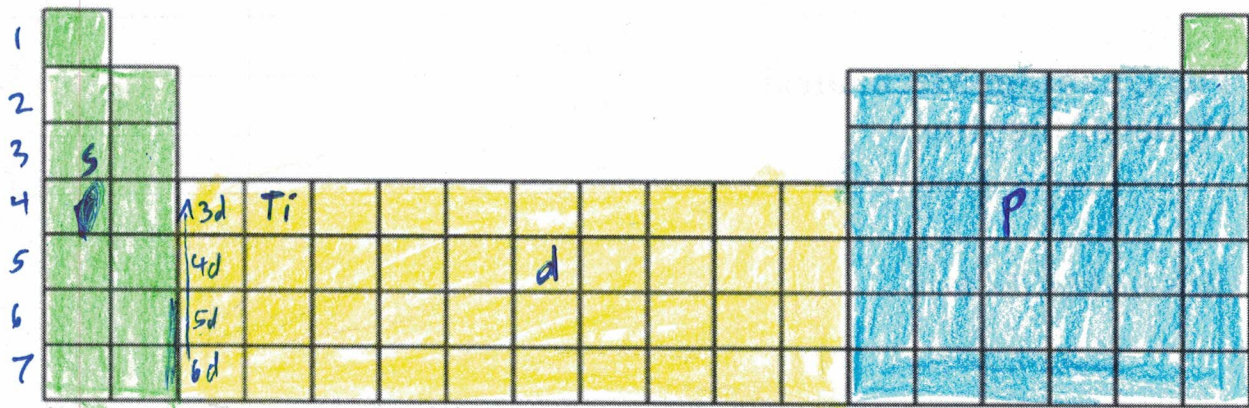


Daisy-Shaped
(10 electrons)

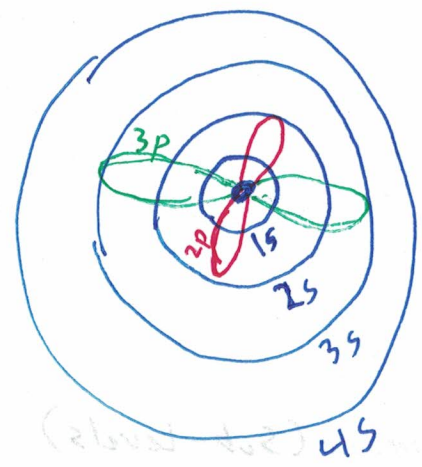
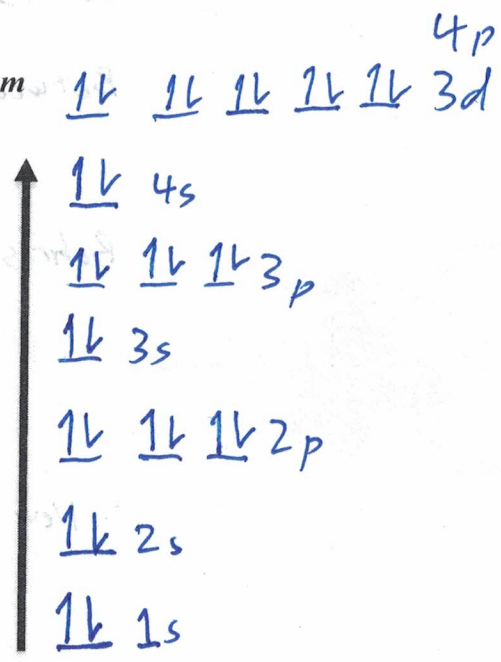
f

(14 electrons)

- Agreed with Bohr
- Still Different Energy Levels
 - Electrons Do Not Exist between



Energy Level Diagram



EXAMPLE: Determine the Electron Configuration for ~~Calcium~~

Titanium #22
22 Electrons

