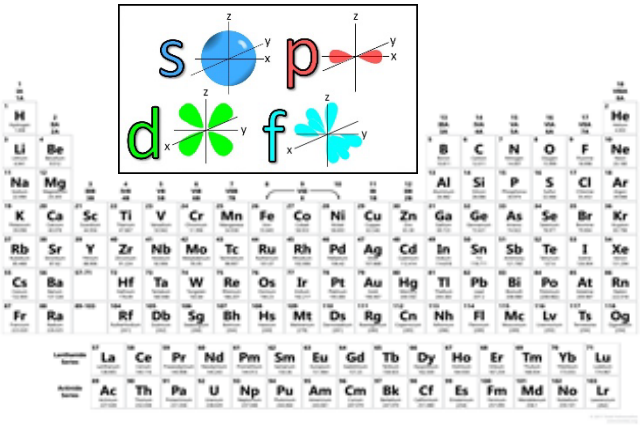
Describing Electrons

Atomic Orbitals



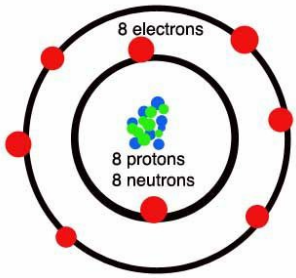
Rules for Filling Orbitals

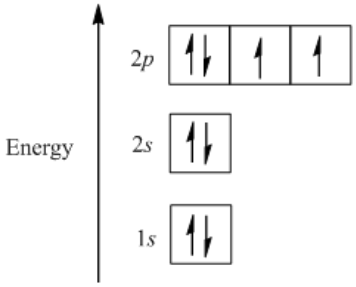
1. **Aufbau principle** – electrons occupy orbitals of _____ energy first

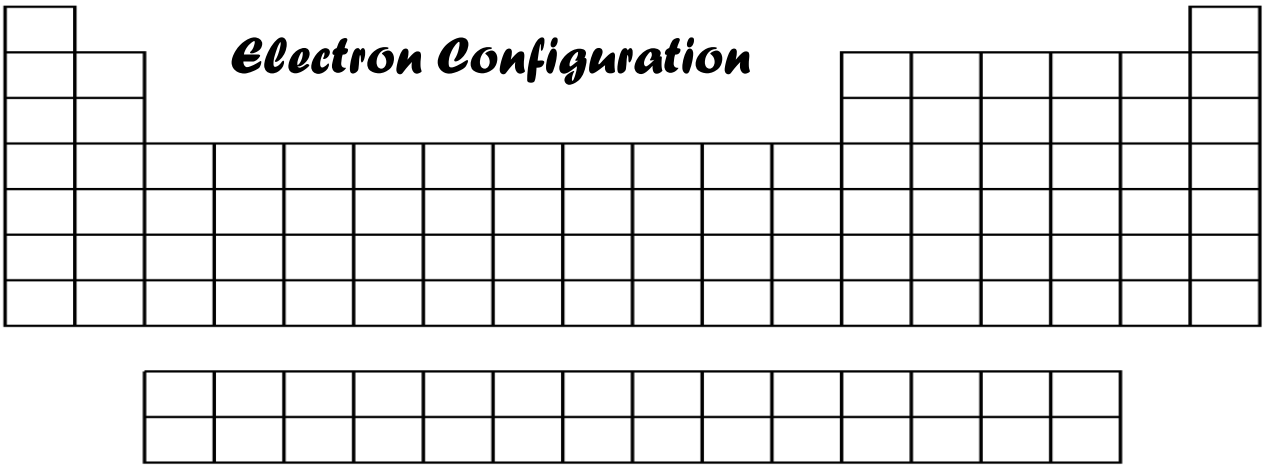
2. **Pauli Exclusion Principle** – an orbital may describe at most _____ electrons

3. **Hund's Rule** - electrons occupy orbitals of the _____ energy so that there is a maximum # of electrons with the _____ spin direction

Aufbau Diagrams and Electron Configuration





$1s^2 2s^2 2p^4$

Electron Configuration