## Filling Order. Remember:

- 1. Electrons are filled closest to the nucleus first: This is the *aufbau* principle.
- 2. s can take 2
  electrons, p can take
  6, d can take 10, and
  f can take 14. This is
  a consequence of the
  Pauli exclusion
  principle.
- 3. 4s fills before 3d, but4s is ionized *before*3d
- 4. d<sup>5</sup> and d<sup>10</sup> have added stability, and are sometimes preferred. Look at Cr and Cu!