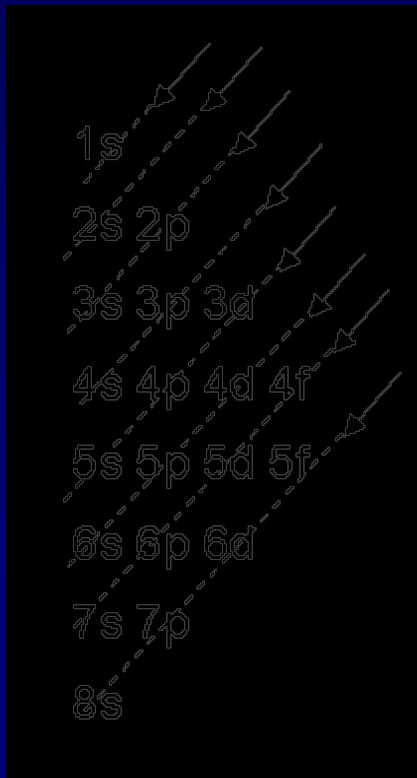


Filling Procedure for Atomic Orbitals

Due to electron-electron interactions, the hydrogen levels fail to give us the correct filling order as we go higher in the periodic table.

The actual filling order is given in the table below. Electrons are added by proceeding along the arrows shown.



This is just a mnemonic.

Home exercise:

Bromine is an element with $Z = 35$. Find its electronic configuration (e.g., $1s^2 2s^2 2p^6 \dots$).

Note:

The chemical properties of an atom are determined by the electrons in the orbitals with the largest n , because they are on the “surface” of the atom.