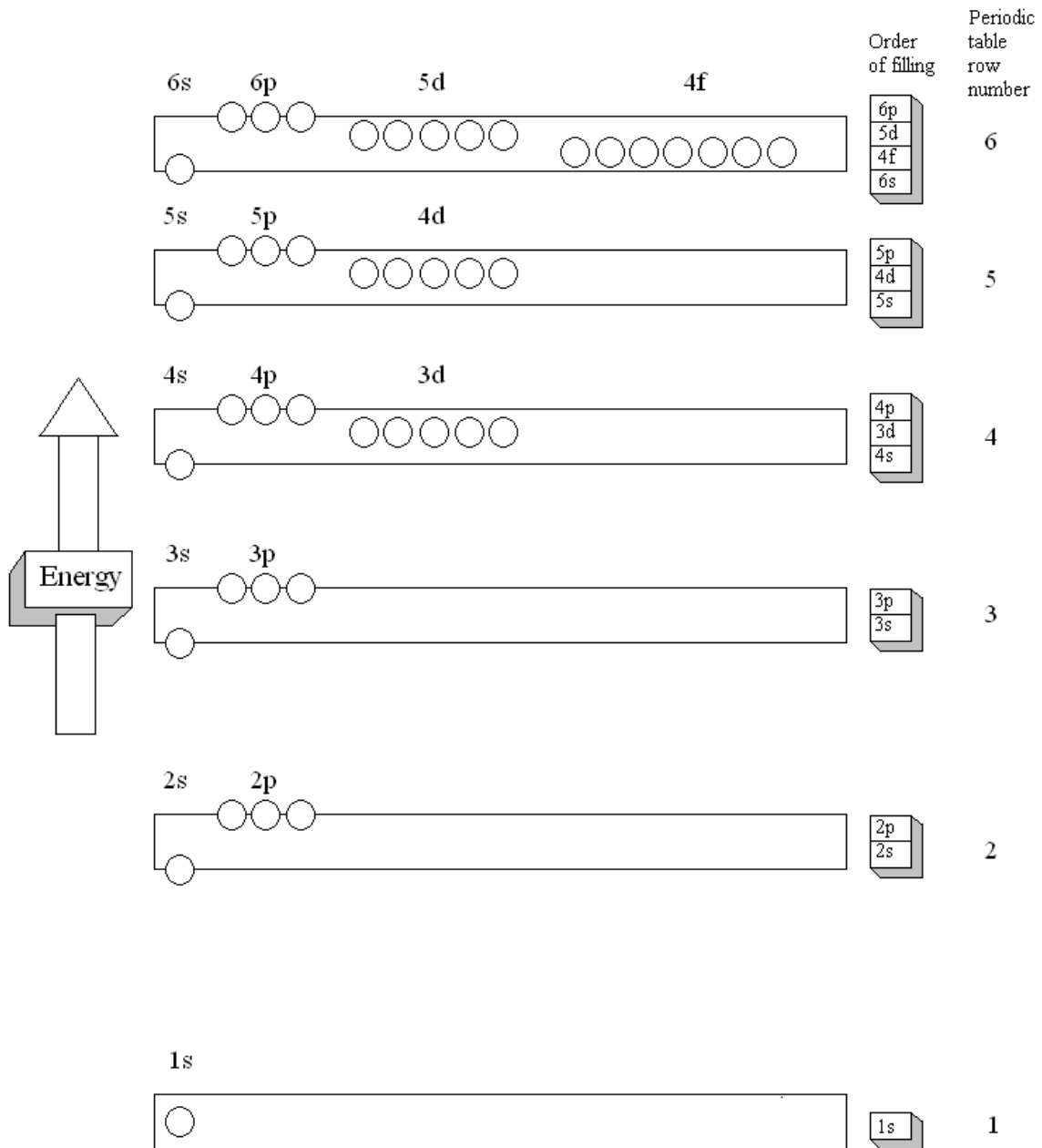


Aufbau Principle:

Hund's Rule:



${}^1\text{H}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^2\text{He}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^3\text{Li}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^4\text{Be}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^5\text{B}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^6\text{C}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^7\text{N}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^8\text{O}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^9\text{F}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{10}\text{Ne}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{11}\text{Na}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{12}\text{Mg}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{13}\text{Al}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{14}\text{Si}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{15}\text{P}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{16}\text{S}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{17}\text{Cl}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{18}\text{Ar}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{19}\text{K}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{20}\text{Ca}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{21}\text{Sc}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{22}\text{Ti}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{23}\text{V}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{24}\text{Cr}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_

${}^{25}\text{Mn}$  1S \_\_\_ 2S \_\_\_ 2P \_\_\_ \_\_\_ 3S \_\_\_ 3P \_\_\_ \_\_\_ 4S \_\_\_ 3d \_\_\_