

$\ell = 0$  $\ell = 1$  $\ell = 2$  $\ell = 3$  $n = 1$ **1s** $n + \ell = 1$  $n = 2$ **2s** $n + \ell = 2$ **2p** $n + \ell = 3$  $n = 3$ **3s** $n + \ell = 4$ **3p****3d** $n + \ell = 5$  $n = 4$ **4s** $n + \ell = 6$ **4p****4d****4f** $n + \ell = 7$  $n = 5$ **5s** $n + \ell = 8$ **5p****5d****5f** $n = 6$ **6s** $n + \ell = 9$ **6p****6d** $n = 7$ **7s** $n + \ell = 10$ **7p** $n = 8$ **8s**