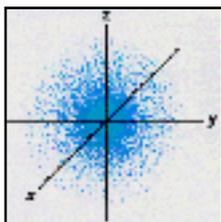


Write the order of orbital filling for an atom's electrons through energy level 7

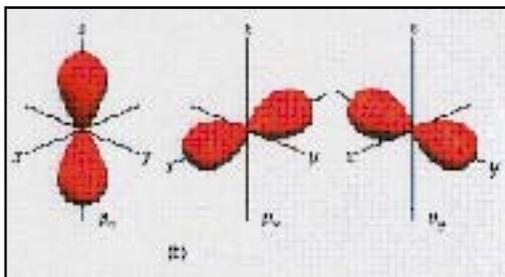
1s 2s 2p 3s 3p 4s 3d 4p 5s 4d 5p 6s 5d 4f 6p 7s 6d 5f 7p

What is the shape of the following orbitals and how many of them are there in each sublevel?

s = 1



p = 3



How do the p orbitals orient to each other and why?

The p orbitals align 90 degrees to each other due to the repulsion of the negatively charged electrons

