

**The notation for the subshell with  $n = 5$  and  $l = 3$  is**

' $n$ ' is the principal quantum number and it describes electron shell (energy level). So,  $n=5$  means it is the fifth electron shell.

' $l$ ' is the azimuthal quantum number and it describes electron subshell (s,p,d etc.). Basically,  $l=0$  corresponds to s orbital,  $l=1$  – p orbital,  $l=2$  – d orbital and  $l=3$  – f orbital.

So, the final notation is **5f**.