

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**.