Spectroscopic Nomenclature

"Shells"

n=1 is "K shell"

n=2 is "L shell"

n=3 is "M shell"

n=4 is "N shell"

n=5 is "O shell"

"Subshells"

ℓ =0 is "s state"

ℓ =1 is "p state"

ℓ =2 is "d state"

ℓ =3 is "f state"

ℓ =4 is "g state"

Example

1 electron in ground state of Hydrogen:

n=1, ℓ =0 is denoted as: $1s^1$

n=1

ℓ =0

1 electron