

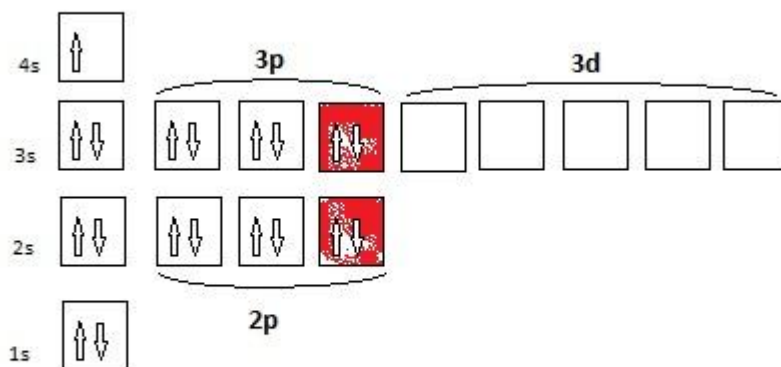
Question #48813, Chemistry, Inorganic Chemistry

The ground state of K (at. No =19) how many electrons have $m_l = +1$ as one of their quantum numbers ?

Answer:

Potassium is in the fourth period of the table. The magnetic quantum number is an integer of from -l to +l through zero, i.e. $2l + 1$ values.

	m
0(s)	0
1(p)	-1 ; 0 ; +1
2(d)	-2; -1; 0; +1; +2



This shows that the quantum number +1 have only p orbitals.

Each orbital owns 2 electrons: $2 \times 2 = 4$