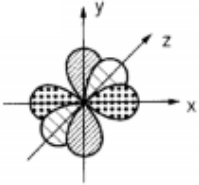

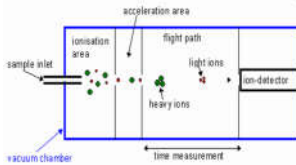


	1	2	3	4	5	6
1		?	Ion drift	Isotope	s-orbital	'spin-up'
2	Neutron		Electrospray ionisation	p-block	?	Mass number
3	Ar	'time of flight'	?	Proton	Aufbau principle	Nucleus
4	Ion acceleration	Ionisation energy	Hund's rule	?	d-electrons	Electron repulsion
5	Detection	Noble Gas	Shielding	Atomic (proton) number		?
6	?	Periods	Principle energy level	The Pauli exclusion principle	$X_{(g)} \rightarrow X^+_{(g)} + e^-$	$\begin{array}{c} 2s \\ \boxed{\uparrow\downarrow} \\ 1s \\ \boxed{\uparrow\downarrow} \end{array} \quad \begin{array}{c} 2p \\ \boxed{\uparrow\downarrow} \quad \boxed{\uparrow} \quad \boxed{\uparrow} \end{array}$

## DP Atomic Structure