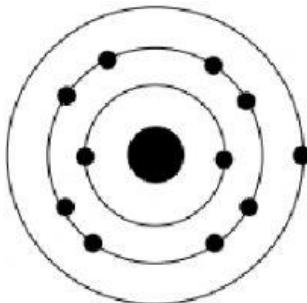


Ionisation Energy- True or False

The statements below refer to this diagram of the electronic structure of an atom.



Please read each statement carefully, and decide whether it is correct or not.

Write 'T' for True and 'F' for False.

1	Energy is required to remove an electron from the atom.	
2	After the atom is ionised, it then requires more energy to remove a second electron because the second electron is nearer the nucleus.	
3	The atom will spontaneously lose an electron to become stable.	
4	Only one electron can be removed from the atom, as it then has a stable electronic configuration.	
5	The nucleus is not attracted to the electrons.	
6	Each proton in the nucleus attracts one electron.	
7	After the atom is ionised, it then requires more energy to remove a second electron because the second electron experiences less shielding from the nucleus.	
8	The nucleus is attracted towards the outermost electron less than it is attracted towards the other electrons.	
9	After the atom is ionised, it then requires more energy to remove a second electron because the second electron is in a lower energy level.	

10	After the atom is ionised, it then requires more energy to remove a second electron because it experiences a greater core charge than the first.	
11	After the atom is ionised, it then requires more energy to remove a second electron because it would be removed from a positive species.	
12	If the outermost electron is removed from the atom it will not return because there will be a stable electronic configuration.	
13	The force on an innermost electron from the nucleus is equal to the force on the nucleus from an innermost electron.	
14	Electrons do not fall into the nucleus as the force attracting the electrons towards the nucleus is balanced by the force repelling the nucleus from the electrons.	
15	The third ionisation energy is greater than the second as there are less electrons in the shell to share the attraction from the nucleus	