

Electron configuration

Remember that we told you during your GCSE that electrons are found in shells around the nucleus of an atom and the first shell can hold two electrons and subsequent shells can hold 8. Well, that's true but, there's more to this than we told you (we never lied though!).

Whilst the first shell can hold a maximum of two electrons and the second can hold a maximum of 8, the third can hold 18 and the fourth can hold 32! Shells can also contain sub-shells and sub-shells are made up of orbitals. I know this may seem confusing but do the following to find out more:

1. Read <https://www.chemguide.co.uk/atoms/properties/atomorbs.html#top>
2. Read <https://www.chemguide.co.uk/atoms/properties/elstructs.html#top>
3. Watch <https://www.youtube.com/watch?v=I6VUlgIEWwU> and <https://www.youtube.com/watch?v=Uef5p84rMws>
4. https://kahoot.it/challenge/0246004?challenge-id=136c06a9-9ca4-487d-a438-4661aff9d427_1691747752318 (Please add your name so I know who you are).

I hope that you find this interesting. We will also cover this in class and by then it will hopefully all make sense.

Love from the Chemistry Department

PS remember, we never lied to you when we said that the third and fourth shells/energy levels can hold 8 electrons, they can. It's just that they can hold more 😊