CAIE IGCSE Chemistry

8.5 Noble gases

Notes

Describe the Group VIII noble gases as unreactive, monatomic gases and explain this in terms of electronic configuration

- Group VIII (8) elements are known as the noble gases
- The noble gases are monatomic gases, meaning the molecules only consist of 1 atom
    - E.g. Argon (Ar), Neon (Ne) and Krypton (Kr)
- Group VIII elements are inert, meaning they are unreactive, due to the electron configuration of the noble gases.
    - The noble gases have full outer shells of electrons, so have 8 electrons in their outermost shell, excluding helium which has 2.
    - I.e. The electron configuration of Argon is 2, 8, 8
    - This means that the noble gases are very stable and unreactive (since they don't need to lose/gain electrons to achieve full electron configuration).