

## Cambridge IGCSE Chemistry

## Topic 9: The Periodic Table Noble gases

**Notes** 



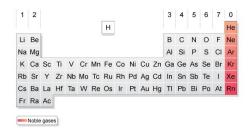






## Describe the noble gases, in Group VIII or 0, as being...

- Unreactive, monatomic gases (exist as He rather than He<sub>2</sub>)
- They have 8 electrons in their outer shell (except helium, which has 2).
- They are unreactive and do not easily form molecules, because they have full outer shells, meaning they have a stable arrangement of electrons.



## State the uses of the noble gases in providing an inert atmosphere, i.e. argon in lamps, helium for filling balloons

- Helium- filling balloons: less dense than air so the balloons float and He is non-flammable
- Neon advertising signs
- argon/krypton/xenon- gas in filament lamps: inert
- argon- shielding gas in welding: denser than air so keeps air off of metal and inert so metal won't oxidise