

## GROUP 18 ELEMENTS (NOBLE/ INERT GAS)

- Consists of:
  1. **Helium** - Use in airship and weather balloons.
  2. **Neon** - Use in advertising light.
  3. **Argon** - Use as inert gas in electric bulb.
  4. **Krypton** - Gas filled electronic device and laser.
  5. **Xenon** - Electronic flash gun.
  6. **Radon** - Natural radioactive gas.
- It is monoatomic which does not react with others or in other words "chemically inert".
- The reason of noble gas does not react with others is because it has achieved octane (or duplet for helium) electron arrangement at the outermost shell.
- Has low melting and boiling point and density. It is colourless as well at room temperature and pressure.
- When going down the group (1-6), the atomic size increases as the number of occupied shells increases. The melting and boiling point increases as well because the force of attraction between atoms is stronger when going down the group.
- The density will increase as well as the molecular mass of the element increases.