Atoms and Reactions

Mass Spectrometry

Remember VIADD: Vaporisation, Ionisation, Acceleration, Deflection, Detection

First Ionisation Energy is the energy required to remove one electron from each atom in one mole of gaseous atoms to form one mole of gaseous 1+ ions.

\[
% \text{ Error} = \frac{\text{no. of readings} \times \text{maximum error in each measurement}}{\text{quantity measured}} \times 100\%
\]

- Litmus Paper is red in acid; blue in alkali!

Common Reactions:

- **Metal + Acid → Salt + Hydrogen**
- **Metal (hydr)Oxide + Acid → Salt + Water**
- **Metal Carbonate + Acid → Salt + Water + Carbon Dioxide**