

Metals and their Compounds

Lecture 1.2

Chemical properties of metals

Metals e.g. sodium	Non-metals e.g. sulfur
Ionise to LOSE electrons and give CATIONS $\text{Na} \rightarrow \text{Na}^+ + e^-$	Ionise to GAIN electrons and give ANIONS $\text{S} + 2e^- \rightarrow \text{S}^{2-}$
Oxides and hydroxides are IONIC $(\text{Na}^+)_2\text{O}^{2-}$	Oxides and hydroxides are COVALENT $\text{SO}_3 \text{ SO}_2$
Oxides and hydroxides are BASIC $\text{Na}_2\text{O} + \text{H}_2\text{O} \rightarrow 2\text{Na}^+\text{OH}^-$	Oxides and hydroxides are ACIDS $\text{SO}_3 + \text{H}_2\text{O} \rightarrow \text{H}_2\text{SO}_4$

Non-metal hydroxides ionise to give H^+ e.g.
sulphuric acid

