

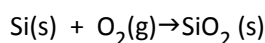
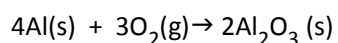
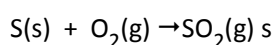
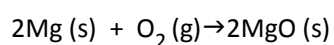
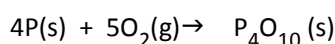
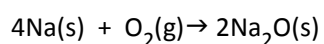
**Period 3 elements and periodicity.**

Electronegativity increases ,Proton number increases (increase in nuclear charge),Same number of electron shells/levels ,to nucleus increases

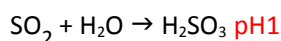
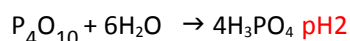
both react with water but Mg requires steam



**Formation of the oxides**



**Reactions of oxides with water**



pH trend of the solutions formed goes from alkaline to acidic. Less electronegative sodium has a weak Na-O bond and the oxygen easily given up to react with H<sup>+</sup>. A strong S-O bond keeps this together and more H<sup>+</sup> is generated. The amphoteric aluminium oxide has a bonding which is both ionic and covalent in nature meaning it reacts with both acids and bases.

Reaction with acids.

