1 Perioidicity I

1.1 Period 3

1.2 Physical Trends

1.3 Chemical Trends

	Na	Mg	Al	Si	P
+ O2	{NaO2} Vigorous, orange flame May form {N2O2}	{MgO} Vigorous, white flame	{Al2O3} Initially vigorous Oxide layer forms	{SiO2} Slow	{P4O6 ->P4O10} Vigorous, yellow fla Mixture forms
O-ide	Alkaline	Alkaline	Amphoteric	Acidic	Acidic
O-ide + H2O	{NaOH} Vigorous	Sparsely soluble	Insoluble	Insoluble	{H3PO4}
O-ide + H+/OH-					
+ Cl2	{NaCl}	{MgCl2}	{AlCl3}	{SiCl4}	{PCl5}
Cl-ide					
Cl-ide + H2O	Neutral		Hydrolysis to acidic soln		Produces {HCl}
+ H2O					