

Chemistry 1 a Week Activity		Higher	3 rd Week
Name: Class:			
What colour flame would sodium ions produce?	State the formula of ammonium sulfate.		
A reaction of nickel oxide and carbon produces nickel and carbon monoxide. $\text{NiO} + \text{C} \rightarrow \text{Ni} + \text{CO}$ Calculate the percentage atom economy for the reaction to produce nickel. Relative atomic masses (Ar): C = 12 Ni = 59 O = 16 Give your answer to 3 significant figures. Atom economy = ...			
Balance the following equations. $\text{Na}_2\text{S}_2\text{O}_3(\text{aq}) + \dots\dots\text{HCl}(\text{aq}) \rightarrow \dots\dots\text{NaCl}(\text{aq}) + \text{SO}_2(\text{g}) + \text{H}_2\text{O}(\text{l}) + \text{S}(\text{s})$ $\dots\dots\text{NO}_2(\text{g}) \rightarrow \dots\dots\text{N}_2 + \dots\dots\text{O}_2(\text{g})$			
State the conditions for the Haber process.	Explain how a catalyst increases the rate of a reaction.		
Draw the structural diagram for a molecule of methane.	A cream precipitate is formed in a reaction. Which ion is shown to be present by the cream precipitate? 		
What are isotopes?	What ion makes a substance acidic? 		