

Chemistry 1 a Week Activity		Higher	30 th Week
Name: Class:			
Aluminium reacts with chlorine gas to form aluminium chloride, AlCl ₃ . Write the balanced equation for this reaction. 	Explain what is meant by the term covalent bond. 		
Draw the dot and cross diagram to show the bonding in a molecule of phosphorus trichloride, PCl ₃ . Show outer electrons only .			
State the formula of a sulfate ion. 	State the formula of aluminium oxide. 		
Complete and balance the equation for this reaction: CaCO ₃ + ...HCl → CaCl ₂ + ... + ...			
How do ionic compounds conduct electricity? 	How does graphite conduct electricity? 		
Calculate the percentage atom economy for the production of silver iodide in this reaction. The equation for the reaction is: AgNO ₃ (aq) + NaI(aq) → AgI(s) + NaNO ₃ (aq) Give your answer to three significant figures.			
Percentage atom economy = ...			
Give one reason why reactions with a high atom economy are used in industry. 			