•	Solid sodium hydroxide reacts with carbon dioxide to produce sodium carbonate and water. Calculate the mass of sodium hydroxide required to prepare 53.0 g of sodium carbonate.	Marks 3
	Answer:	
•	Analysis of an unknown compound returned the following percentage composition by weight: nitrogen: 26.2%; chlorine: 66.4% hydrogen 7.5%	3
	What is the empirical formula of this compound?	
	Answer:	