

Subject	Year	Term
Chemistry	12	2
Topic		
3.1.4 Qualitative Analysis		
Content (Intent)		
Prior Learning (Topic) 2.1.2 Compounds, formulae and equations, 3.1.3 Group 7		
Tests for ions		
(a) qualitative analysis of ions on a test-tube scale; processes and techniques needed to identify the following ions in an unknown compound:		
(i) anions:		
<ul style="list-style-type: none"> • CO_3^{2-}, by reaction with $\text{H}^+(\text{aq})$ forming $\text{CO}_2(\text{g})$ (see 2.1.4 c) • SO_4^{2-}, by precipitation with $\text{Ba}^{2+}(\text{aq})$ • Cl^-, Br^-, I^- (see 3.1.3 g) 		
(ii) cations: NH_4^+ , by reaction with warm $\text{NaOH}(\text{aq})$ forming NH_3 .		
Future Learning (Topic) 5.3.2 Qualitative analysis		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<i>Practical work</i> PAG 4.2 Identifying unknowns 2 PAG 4.3 Identifying unknowns 3 Written Order for the identifying tests	- Practise questions completed in class and for homework - 1 x standard homework (Grade given. Written feedback. Verbal feedback to class)	
How can parents help at home?		
Look at the topic specific resources on the VLE Use appropriate websites: MachemGuy, Allery Chemistry, Chemistry World – by Royal Society of Chemistry, ChemGuide. Take an interest! Ask your children what they have learnt and be curious about their learning.		
Helpful further reading/discussion		
Reading The Science of Everyday Life by Marty Jopson Why Chemical Reactions Happen by Keeler and Wothers	Vocabulary Lists <i>Cation</i> <i>Anion</i> <i>precipitate</i>	Careers Links Analytical chemist Chemical engineer Clinical biochemist Forensic scientist Pharmacologist Process chemist Quality control analyst Research scientist

Chapter 8.3 of A level chemistry for OCR		Science writer Site chemist Teacher or lecturer Degrees; Chemistry Biochemistry Biomedical science Biological sciences Medicine Research chemist Veterinary medicine
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