

Subject	Year	Term
Chemistry	12	1
Topic		
2.1.2 Compounds, formulae and equations.		
Content (Intent)		
<b>Prior Learning (Topic) 11C1 Structure and bonding,</b>		
<b>Formulae and equations</b>		
<p><b>(a)</b> the writing of formulae of ionic compounds from ionic charges, including:</p> <ul style="list-style-type: none"> <li>(i) prediction of ionic charge from the position of an element in the periodic table</li> <li>(ii) recall of the names and formulae for the following ions: <math>\text{NO}_3^-</math>, <math>\text{CO}_3^{2-}</math>, <math>\text{SO}_4^{2-}</math>, <math>\text{OH}^-</math>, <math>\text{NH}_4^+</math>, <math>\text{Zn}^{2+}</math> and <math>\text{Ag}^+</math></li> </ul> <p><b>(b)</b> construction of balanced chemical equations (including ionic equations), including state symbols, for reactions studied and for unfamiliar reactions given appropriate information.</p>		
<b>Future Learning (Topic) 2.1.4 Acids, 3.1.2 Group 2, 3.1.3 Group 7, 5.3.1 Transition elements, 5.2.3 Redox</b>		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Practical work</p> <p>Reactions of acids with metals, carbonates, bases, alkalis</p> <p>Written</p> <p>Writing balanced equations for reactions of acids</p> <p>Practise of writing formulae for compounds</p>	exam questions in lessons and homework	
How can parents help at home?		
<p>Look at the topic specific resources on the VLE</p> <p>Use appropriate websites: MachemGuy, Allery Chemistry, Chemistry World – by Royal Society of Chemistry, ChemGuide.</p> <p>Take an interest! Ask your children what they have learnt and be curious about their learning.</p>		
Helpful further reading/discussion		
<p><b>Reading</b></p> <p>The Science of Everyday Life by Marty Jopson</p> <p>Why Chemical Reactions Happen by Keeler and Wothers</p> <p>Chapter 2 of A level chemistry for OCR</p>	<p><b>Vocabulary Lists</b></p> <p><i>Ionic</i></p> <p><i>Charges</i></p> <p><i>Anions</i></p> <p><i>Cations</i></p> <p><i>Formulae</i></p> <p><i>Ionic equations</i></p> <p><i>State symbols</i></p>	<p><b>Careers Links</b></p> <p>Analytical chemist</p> <p>Chemical engineer</p> <p>Clinical biochemist</p> <p>Forensic scientist</p> <p>Pharmacologist</p> <p>Process chemist</p> <p>Quality control analyst</p> <p>Research scientist</p> <p>Science writer</p> <p>Site chemist</p> <p>Teacher or lecturer</p> <p>Degrees;</p>

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