

Subject	Year 9 Chemistry Threshold Concepts – Spring Term	How to support students' learning
Reactions of acids	<p><b><i>Reactions of acids with metals (HT only)</i></b></p> <ul style="list-style-type: none"> <li>• <b><i>Explain in terms of gain or loss of electrons, that these are redox reactions</i></b></li> <li>• <b><i>Identify which species are oxidised and which are reduced in given chemical equations</i></b></li> </ul> <p><b>Neutralisation of acids and salt production</b></p> <ul style="list-style-type: none"> <li>• Predict products from given reactants</li> <li>• Use the formulae of common ions to deduce the formulae of salts</li> </ul> <p><b>Soluble salts</b></p> <ul style="list-style-type: none"> <li>• Describe how to make pure, dry samples of named soluble salts from information provided</li> </ul> <p><b>The pH scale and neutralisation</b></p> <ul style="list-style-type: none"> <li>• Describe the use of universal indicator or a wide range indicator to measure the approximate pH of a solution</li> <li>• Use the pH scale to identify acidic or alkaline solutions</li> </ul>	<p>Encourage your child to watch this video on redox reactions <a href="#">GCSE Chemistry - Oxidation and Reduction - Redox Reactions #39 (Higher Tier) - YouTube</a></p> <p>Encourage your child to visit this website to learn about acids, bases, salts and neutralisation reactions <a href="#">Neutralisation   S-cool, the revision website</a></p>

	<p><b><i>Strong and weak acids (HT only)</i></b></p> <ul style="list-style-type: none"><li><b><i>• Use and explain the terms dilute and concentrated (in terms of amount of substance), and weak and strong (in terms of the degree of ionisation) in relation to acids</i></b></li><li><b><i>• Describe neutrality and relative acidity in terms of the effect on hydrogen ion concentration and the numerical value of pH (whole numbers only)</i></b></li></ul>	<p>Encourage your child to watch this video on strong and weak acids <a href="#">GCSE Chemistry - The pH Scale &amp; Strong vs Weak Acids (Higher Tier) #35 - YouTube</a></p>
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