



<p>In this unit I will be learning about electrolysis, reactivity series and equilibrium</p>	<p>The key words I will learn in this unit are...</p>
<p>This unit I am learning:</p> <ul style="list-style-type: none"> • How the reactivity series determines how we separate metals from their compounds • How we can use dynamic equilibrium to maximise the yield of a product <p>By the end of this unit I will be able to:</p> <ul style="list-style-type: none"> • Explain how electrolysis separates ionic compounds • Predict the products of electrolysis using knowledge of the reactivity of compounds • Explain the advantages and disadvantages of different extraction methods • Describe what reduction and oxidation are • Explain what equilibrium is and how we can maximise the amount of desired product we make 	<p>Electrolysis Anion Cation Electrode Anode Cathode Phytoextraction Oxidation Reduction Redox Recycle Dynamic equilibrium</p>

Week's Learning	Literacy and Numeracy Links	100% Sheet Homework
<p>Week 1 Describe the process of electrolysis Apply knowledge of electrolysis to predict the products of the electrolysis of water Apply knowledge of the reactivity series to predict the products at the electrodes for a range of aqueous electrolytes Construct half equations for reactions at the anode and cathode Explain redox in terms of the movement of electrons Explain whether reduction or oxidation is occurring in each half equation Investigate the electrolysis of copper sulfate solution with inert and copper electrodes Explain how this process can be used to purify copper.</p>		<p>I will complete this home learning...</p> <p>200 correct questions answered on Tassomai</p>
<p>Week 2 Explain the reactivity series of metals Recall the position of elements in the reactivity series Explain the reactivity of some metals based upon their reactions with water and acids Explain displacement reactions as redox reactions Suggest how a metal's relative resistance to oxidation is related to its position in the reactivity series Explain why metals are extracted in different ways Evaluate the use of electrolysis and heating to extract metals Evaluate alternative biological methods of metal extraction</p>		<p>200 correct questions answered on Tassomai</p>
<p>Week 3 Evaluate the advantages of recycling metals Describe the stages involved in life cycle assessment Explain dynamic equilibrium Describe what a reversible reaction is Explain what dynamic equilibrium is Suggest how the direction of equilibrium can be altered Describe the Haber process Recall the conditions for the Haber process Predict how the position of equilibrium can be affected by changes in conditions (HT only)</p>		<p>200 correct questions answered on Tassomai</p>
<p>Week 4 Revision End of Topic test</p>		<p>200 correct questions answered on Tassomai</p>

Resources to support:
www.bbc.co.uk/bitesize
www.getrevising.com
www.senecalearning.com

Social, Moral, Spiritual, Cultural and British Values linked to this learning programme:

Assessment:

Students will complete one diagnostically marked piece of work per unit and one end of unit assessment.