

Summer Term – Remotely Learning Plan

Year 9 – Chemistry (Separate Science)

Week:	Instructions to Parents/Students
28B – 20 th April	Introducing electrolysis – watch https://www.youtube.com/watch?v=AhTRiL6xjBA . Explain what electrolysis is and why it only works in molten or dissolved ionic compounds. Describe what reactions occur at the anode and cathode when molten lead bromide is electrolysed. HT tier – For lead bromide - write the half equations happening at each electrode and describe them as either reduction or oxidation and why.
29A – 27 th May	Electrolysis of Aluminium Oxide – Watch https://www.youtube.com/watch?v=YcyMEIBEzAY . Explain why electrolysis is used to extract certain metals like aluminium. Describe the role cryolite in this process and why the graphite anodes have to be replaced regularly. HT tier – Able to write the half equations for the reactions happening at the anode and cathode. Attempt question 3 on this site: https://www.savemyexams.co.uk/revision/gcse-chemistry-aqa-new/chemical-changes/electrolysis/
30B – 4 th May	Electrolysis of Aqueous solutions – Watch both of these clips https://www.youtube.com/watch?v=6WjC_Vi4roA and https://www.youtube.com/watch?v=mL7mkqyLpSo .
31A – 11 th May	Recap what aqueous means and explain what is produced at each electrode when copper sulphate solution and sodium chloride solution are electrolysed. Produce a set of rules for the products formed at each electrode when aqueous solutions are used. HT tier – Write the half equations for the reactions happening at the anode and cathode. Attempt questions 1,2 and 4 on this site: https://www.savemyexams.co.uk/revision/gcse-chemistry-aqa-new/chemical-changes/electrolysis/
32B – 18 th May	Required practical 3 – Electrolysis. Watch - https://www.youtube.com/watch?v=ukbtTG1Kew and write out a detailed method explaining how to investigate what happens when aqueous solutions undergo electrolysis and what conclusions could be drawn from the investigation.
33A – 1 st June	Exothermic and endothermic reactions - Watch https://www.youtube.com/watch?v=4HS6D0hTzdg . Describe what is meant by an exothermic and an endothermic reaction, and the differences between them. Define what is meant by the activation energy. Draw and label reaction profiles for exothermic and endothermic reactions and activation energy. Read over these notes: https://www.savemyexams.co.uk/gcse-chemistry-aqa-new/revision-notes/energy-changes/exothermic-endothermic-rxns/energy-transfer-in-reactions/
34B – 8 th June	https://www.savemyexams.co.uk/gcse-chemistry-aqa-new/revision-notes/energy-changes/exothermic-endothermic-rxns/reaction-profiles/
35A – 15 th June	Bond energy calculations – Watch both of these clips https://www.youtube.com/watch?v=eExCBkp4jB4 and https://www.youtube.com/watch?v=PdValXAVUOc . and look at this site https://www.savemyexams.co.uk/gcse-chemistry-aqa-new/revision-notes/energy-changes/exothermic-endothermic-rxns/the-energy-change-of-reactions/
36B – 22 nd June	Understand the energy changes that take place when chemical bonds are broken or formed. Understand the calculations involved in carrying out a bond energy calculation. Test your knowledge by attempting the questions here. https://www.savemyexams.co.uk/revision/gcse-chemistry-aqa-new/energy-changes/exothermic-endothermic-rxns/
37A – 29 th June	Required practical 4 – temperature change. Watch - https://www.youtube.com/watch?v=rd17xEq4Ew8 and write out a detailed method explaining how you could find out the temperature change for a neutralisation reaction.
38B – 6 th July	Cells and batteries – Watch https://www.youtube.com/watch?v=riikUBLFBJs . Explain what is meant by a cell and a battery and evaluate the use of different metals in cells and batteries. Describe the difference between rechargeable and non-rechargeable batteries.

39A – 13th July

Fuel cells – Watch <https://www.youtube.com/watch?v=iJgMuDzkdkl>. Explain what is meant by a hydrogen fuel cell and evaluate the use of these cells in comparison to rechargeable cells and batteries. Test your knowledge by attempting the questions here. <https://www.savemyexams.co.uk/revision/gcse-chemistry-aqa-new/energy-changes/chemical-cells-fuel-cells/>

Useful resources:

<https://www.physicsandmathstutor.com/chemistry-revision/gcse-aqa/>

<https://www.revisely.co.uk/gcse/chemistry/aqa>

<http://www.docbrown.info/gcsechemistry.htm>

<https://www.savemyexams.co.uk/gcse-chemistry-aqa-new/revision-notes/>

<https://www.bbc.co.uk/bitesize/examspecs/z8xtmnb>

Higher chemistry paper 1 and mark schemes

<https://filestore.aqa.org.uk/sample-papers-and-mark-schemes/2018/june/AQA-84621H-QP-JUN18.PDF> <https://filestore.aqa.org.uk/sample-papers-and-mark-schemes/2018/june/AQA-84621H-W-MS-JUN18.PDF>

<https://filestore.aqa.org.uk/resources/chemistry/AQA-84621H-SQP.PDF> <https://filestore.aqa.org.uk/resources/chemistry/AQA-84621H-SMS.PDF>