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Principal: Mrs C Stanyer

Subject: Chemistry (Triple HT) Year 11 Curriculum Map 2020 – 2021

Resources:

Week Commencing	Topic (including links to additional resources)	Assessment Window
1 st September	<u>5.7.1 Carbon Compounds as Fuels and Feedstock</u> What is the test for alkanes and alkenes? What do we use alkenes for?	https://www.omerascience.co.uk/organic-chemistry https://www.bbc.co.uk/bitesize/topics/z9488mn https://www.my-gcsescience.com/aqa/chemistry/alkenes/
7 th September	<u>5.7.1 Carbon Compounds as Fuels and Feedstock (Triple only)</u> What are alcohols, carboxylic acids and esters? Investigating the production of esters from a dicarboxylic acid and diol.	https://www.omerascience.co.uk/organic-chemistry https://www.bbc.co.uk/bitesize/topics/z9488mn https://www.my-gcsescience.com/aqa/chemistry/carboxylic-acids/ https://www.my-gcsescience.com/aqa/chemistry/alcohols/
14 th September	<u>5.8.1 Purity, Formulations, and Chromatography</u> What is meant by the term "purity" in chemistry? What are some examples of pure and impure substances? How does the purity of a substance alter its properties and uses?	https://www.omerascience.co.uk/chemical-analysis https://www.bbc.co.uk/bitesize/topics/zgbccj6
21 st September	<u>5.8.1 Purity, Formulations, and Chromatography</u> What is a formulation in chemistry? What are some examples of formulations? What happens if a formulation is not made correctly, e.g. in medicine?	https://www.omerascience.co.uk/chemical-analysis https://www.bbc.co.uk/bitesize/topics/zgbccj6 https://www.my-gcsescience.com/aqa/chemistry/purity-and-formulations/
28 th September	<u>5.8.1 Purity, Formulations, and Chromatography</u> What is the process of chromatography? How does it work? Required Practical- Investigation; how do you use chromatography to determine the contents of a mixture.	https://www.omerascience.co.uk/chemical-analysis https://www.bbc.co.uk/bitesize/topics/zgbccj6 https://www.my-gcsescience.com/aqa/chemistry/chromatography/
5 th October	<u>5.8.1 Purity, Formulations, and Chromatography</u> What are the limitations of chromatography? What are alternative methods of chemical analysis, and who might use them? (Triple only- spectroscopic methods of analysis)	https://www.omerascience.co.uk/chemical-analysis https://www.bbc.co.uk/bitesize/topics/zgbccj6 https://www.my-gcsescience.com/aqa/chemistry/instrumental-methods-of-analysis/
12 th October	<u>5.8.2 Identification of Common Gases</u> What are the tests for CO ₂ , O ₂ , H ₂ , Cl ₂ and H ₂ O? Investigation; applying these tests to a practical situation.	https://www.omerascience.co.uk/chemical-analysis https://www.bbc.co.uk/bitesize/topics/zgbccj6 https://www.my-gcsescience.com/aqa/chemistry/gas-tests/

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19 th October (inset Friday 22 nd)	<u>5.8.2 Identification of Common Gases</u> How are gas tests used in industry, and why might they be important? (Triple only- what are the tests for common anions and cations?)	https://www.omerascience.co.uk/chemical-analysis https://www.bbc.co.uk/bitesize/topics/zgbccj6 Triple Only; https://www.my-gcsescience.com/aqa/chemistry/tests-for-cations/ https://www.my-gcsescience.com/aqa/chemistry/tests-for-anions/
Half Term		
2 nd November	<u>5.9.1 The composition and evolution of the Earth's atmosphere.</u> What was Earth's early atmosphere like? What events produced gases in the early atmosphere? What events changed the percentages of gases over time?	https://www.omerascience.co.uk/atmospheric-pollutants https://www.bbc.co.uk/bitesize/topics/zysvv9g https://www.my-gcsescience.com/aqa/chemistry/the-earths-atmosphere/
9 th November		AR1 ASSESSMENTS
16 th November		AR1 ASSESSMENTS
23 rd November	<u>5.9.1 The composition and evolution of the Earth's atmosphere.</u> What are the "greenhouse gases" and what events/actions cause their production? How do greenhouse gases lead to global warming? What can be done to limit the impact of greenhouse gases on the climate?	https://www.omerascience.co.uk/atmospheric-pollutants https://www.bbc.co.uk/bitesize/topics/zysvv9g https://www.my-gcsescience.com/aqa/chemistry/greenhouse-gases-and-global-warming/
30 th November	<u>5.9.1 The composition and evolution of the Earth's atmosphere.</u> What is climate change, and what issues does it pose to life on Earth? What is a "carbon footprint", and how is it calculated? How can we reduce our carbon footprint?	https://www.omerascience.co.uk/atmospheric-pollutants https://www.bbc.co.uk/bitesize/topics/zysvv9g
7 th December	<u>5.10 Using Resources</u> What is potable water? How is potable water different to freshwater/groundwater/surface water?	https://www.my-gcsescience.com/aqa/chemistry/potable-water/ (https://www.omerascience.co.uk/using-resources)
14 th December	<u>5.10 Using Resources</u> Required Practical; analysing water samples and purifying water. Analysis of results	
Christmas Holiday		
4 th January	<u>5.10 Using Resources</u> What is waste water? How is waste water treated to make it potable? What are some issues with waste water?	
11 th January	<u>5.10 Using Resources</u> HT What are some alternative methods of extracting metals? Why are we increasingly moving towards alternative methods of metal extraction? Case study; the rare metals used in smart phones and how big companies are recycling metals.	https://www.my-gcsescience.com/aqa/chemistry/alternative-methods-of-extracting-metals/

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18 th January	<p><u>5.10 Using Resources</u> What is a "Life Cycle Assessment (LCA)"? How is an LCA carried out? Case study- the LCA for an Audi. How can we change an LCA for a product, as consumers?</p>	https://www.my-gcsescience.com/aqa/chemistry/life-cycle-assessment/
25 th January		FULL MOCK EXAMS
1 st February		FULL MOCK EXAMS
8 th February (Inset 12 th February)		FULL MOCK EXAMS
February Half Term		
22 nd February	<p><u>5.10 Using Resources</u> What is meant by the term "corrosion"? What issues does corrosion produce? How can we prevent corrosion?</p>	https://www.my-gcsescience.com/aqa/chemistry/corrosion-and-rusting/
1 st March	<p><u>5.10 Using Resources</u> Case study- Golden Gate Bridge- the never-ending paint job. Investigation; preventing rust on a nail. Analysis of results.</p>	
8 th March	<p><u>5.10 Using Resources</u> What do the terms "ceramic", "polymer", "alloy" and "composite" mean in chemistry? How are each of these materials produced? What are the advantages/disadvantages of each?</p>	https://www.my-gcsescience.com/aqa/chemistry/using-materials/
15 th March	<p><u>5.10 Using Resources</u> What is the Haber Process? What are the conditions in the Haber Process, and why are they used? What is the industrial relevance of this reaction?</p>	https://www.my-gcsescience.com/aqa/chemistry/the-haber-process-3/
22 nd March	<p><u>5.10 Using Resources</u> What is meant by an NPK fertilizer? How is an NPK fertilizer produced? What environmental issues may overuse lead to?</p>	https://www.my-gcsescience.com/aqa/chemistry/npk-fertilisers/
29 th March	Revision	
Easter Holiday		
19 th April	Revision	
26 th April	Revision	
3 rd May	Revision	
10 th May	Revision	
17 th May		

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24 th May		
7 th June		
14 th June		
21 st June		
28 th June		
5 th July		
12 th July		
19 th July (School closed from 22 nd)		

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