

Curriculum Assessment Map: Year 10 Chemistry



	Autumn Term	Spring Term	Summer Term
Topic	Chemical changes Quantitative chemistry	Energy changes	Chemical analysis Chemistry of the atmosphere Using resources
Key Learning & Skills	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to understand the conservation of mass Pupils to recap calculating relative formula mass Pupils to be able to balance equations Pupils to be able to calculate changes of mass when using gases Pupils to be able to calculate concentration of solutions Pupils to be able to calculate moles and limiting reactants Pupils to be able to state the reactivity series of metals and how this links to metal extraction Pupils to be able to explain oxidation and reduction in metals Pupils to be able to explain the neutralisation of acids Pupils to be able to describe the process of electrolysis <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Calculating relative formula mass, concentration and changes in mass. Practical skills: Pupils to develop their skills on preparing salts and electrolysis 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to describe the meaning of exothermic and endothermic Pupils to explain different energy changes that occur in reactions Pupils to be able to draw and label reaction profiles Pupils to investigate energy changes Pupils to be able to calculate bond energies in certain reactions Triple only: Pupils to be able to describe how chemical cells and batteries work. Pupils to describe role of hydrogen fuel cells and evaluate its effectiveness <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Calculating bond enthalpy Practical skills: Pupils to investigate temperature change in chemical reactions including neutralisation and displacement reactions 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to describe what a pure substance is Pupils to describe gas tests for H₂, Cl₂, O₂ and CO₂ Pupils to separate mixtures using chromatography Pupils to explain how the Earth's atmosphere has evolved Pupils to describe the cause and effects of global warming Pupils to describe how drinking water is produced. Pupils to explain how copper is extracted Pupils to explain the use of LCAs Triple only: Pupils to carry out flame tests. Pupils to describe the role and reactions of carbonates, halides, metal hydroxides and sulfates Pupils to explain different methods to prevent corrosion. Pupils to explain the Haber process. Pupils to explain how fertilised are made and why they are used. <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Analysis of graphs and tables Practical skills: Carry out gas tests. Investigate paper chromatography Triple only: Identify ions using single tests
End points	Please see module specific endpoints throughout books	Please see module specific endpoints throughout books	Please see module specific endpoints in books
Informal (formative) Assessment	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet
Formal (summative) Assessment	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised 	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised 	<ul style="list-style-type: none"> End of topic assessment Feedback is individualised

Curriculum encompassing literacy, careers and enrichment as well as interconnectivity with other subjects

Curriculum Assessment Map: Year 11 Chemistry



	Autumn Term	Spring Term	Summer Term
Topic	Earth and atmosphere Separate chemistry 2	Fuels Separate chemistry 2	Paper 1 and Paper 2 Chemistry revision
Key Learning & Skills	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to recall the percentages of gases in early and current atmosphere. Pupils to be able to explain why these changes in the atmosphere occurred. Pupils to be able to describe the chemical test for oxygen. Pupils to be able to explain the greenhouse effect. Pupils to be able to explain the effect of human activity on climate change. Triple only: Pupils to complete flame tests for different ions. Pupils to describe the tests for different ions. <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Analysing graphs Practical skills: To test for oxygen in various chemical reactions. Triple only: To identify ions present 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils to describe what a hydrocarbon is. Pupils to describe what crude oil is and explain the role and process of fractional distillation. Pupils to explain what the uses of fractional distillation are. Pupils to be able to identify and draw alkenes and alkanes and explain their properties. Pupils to state the equation for complete and incomplete combustion and the issues with the latter. Pupils to explain how acid rain is formed. Pupils to explain the process of cracking to produce helpful products. Pupils to compare the use of diesel/petrol cars to hydrogen cars. <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: analysing graphs Practical skills: To test for carbon dioxide in chemical reactions 	<p><u>Key Learning</u></p> <ul style="list-style-type: none"> Pupils will be recapping content covered in their GCSE exam. QLA's will inform what topics to revise in class and for intervention. Knowledge will be applied to exam questions. <p><u>Skills</u></p> <ul style="list-style-type: none"> Mathematic skills: Pupils to recap common maths skills covered in the specification. Practical skills: Pupils to recap all Biology core practicals
End points	Please see module specific endpoints throughout books	Please see module specific endpoints throughout books	Please see module specific endpoints in books
Informal (formative) Assessment	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet 	<ul style="list-style-type: none"> Live feedback in lessons Midpoint assessment of a 6-mark exam question based on content covered. Feedback is provided by a whole class feedback sheet
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