

Intent : Science curriculum intent: As a school our curriculum inspires students to want to know more, understand more and be able to do more. In science we intend to harness the innate desire in young people to want to know more about the world and use this to help them understand how the strands of science learning fit into the big picture. We intend to help the students develop into learners who can see a problem and work both independently and together to find a solution. We recognise that all young people are scientists, and we aim to enable them to develop these skills. By year 11 students will have covered all the “paper one” topics for each science and will aim to finish the course in time for their final mock. They will then consolidate their learning and revise key areas before their final GCSE exams in the summer.



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 11 combined chemistry units	CC11 obtaining and using metals & CC12 reversible reactions and equilibria CC13 groups in the periodic table, CC14 rates, CC15 energy changes in reactions	CC13 groups in the periodic table, CC14 rates, CC15 energy changes in reactions	CC16 Fuels & CC17 Earth and atmosphere	Mock two revision	Exams and revision	Exams and revision
Key Content	<u>CC11 obtaining and using metals & CC12 reversible reactions and equilibria</u> Reactivity series, redox reactions, metal extraction methods, recycling, and reversible reactions. <u>CC13 groups in the periodic table, CC14 rates, CC15 energy changes in reactions</u> Properties and reactions of Group 1, Group 7, and Group 0 elements. Factors affecting reaction rates, catalysts, exothermic and endothermic reactions, and energy profiles.	<u>CC13 groups in the periodic table, CC14 rates, CC15 energy changes in reactions</u> Properties and reactions of Group 1, Group 7, and Group 0 elements. Factors affecting reaction rates, catalysts, exothermic and endothermic reactions, and energy profiles.	<u>CC16 Fuels & CC17 Earth and atmosphere</u> Covers hydrocarbons, combustion, pollution, climate change, and Earth's atmospheric evolution.	All the content for GCSE combined science can be found here, in the exam specification .		
Literacy	Key word sheets – CC11,12,13,14 & 15	Key word sheets – CC13, 14, 15	Key word sheets – CC16 & 17	All previous key word sheets are relevant for revision		
Knowledge organiser	Knowledge organiser – CC11,12,13,14 & 15	Knowledge organiser – CC13, 14, 15	Knowledge organiser – CC16 & 17	All previous knowledge organisers are relevant for revision.		
Assessment		Mock 2 will cover all the content from “paper 1” in chemistry.		Mock three will cover all the content from “paper 2” in chemistry.		

GCSE AO Link (or other) if applicable	In science the assessment objectives are: AO1 Demonstrate knowledge and understanding. AO2 Apply knowledge and understanding. AO3 Analyse information and ideas. These are all covered in each block of three modules.			
Homework	One piece of homework, set on Seneca, each week. This will form an important part of the student's revision and should take around 30 minutes.			
CEIAG – STEM careers that relate to these topics.	Electrochemical Engineer Mining Engineer Sustainability Consultant Industrial Chemist	Catalysis Researcher Energy Consultant Process Engineer Thermochemist	Petroleum Engineer Environmental Scientist Climate Policy Advisor Renewable Energy Specialist	
Enrichment				