

Scope and Sequence Document for: IGCSE Chemistry

Tutor	Ann Humphreys		
Tutor qualifications:	B Sc (Hons) Chemistry, Lancaster PGCE	<u>Exams</u> Y10 – week 38 2021 Y11 – week 23 2022	IGCSE Chemistry CAIE 0620
Resources required:	Cambridge IGCSE Chemistry Coursebook, (2014), Richard Harwood & Ian Lodge, ISBN 9781107615038, CUP; Cambridge IGCSE® Chemistry Revision Guide, (2015), R Norris, ISBN - 9781107697997, CUP Basic chemistry set.		

Module No.	NSW week No.	Week beginning Monday the:	Contents of study
1	1	05/09/22	<u>States & Separations</u> – a more in depth look at work you may be familiar with on States of Matter and Kinetic theory, plus Separations of various types of Mixtures
	2	12/09/22	
	3	19/09/22	
2	4	26/09/22	<u>Basic Chemistry</u> – Atoms, Molecules, Elements, Compounds, more movement of particles looking at Brownian motion and Diffusion. Writing Chemical formula and Balancing equations There are 2 assignments for this Module
	5	03/10/22	
	6	10/10/22	
	7	17/10/22	
	8	24/10/22	Half Term
3	9	31/10/22	<u>Air, water & Land</u> – the Carbon cycle and Limestone. Air and Oxygen, including atmospheric pollution. Water, its purification, its uses and its availability
	10	07/11/22	
	11	14/11/22	
4	12	21/11/22	<u>Atomic Structure & the Periodic Table</u> – the structure of an Atom, Isotopes, Electron arrangements. The structure of the Periodic table and looking at some important Groups
	13	28/11/22	
	14	05/12/22	
	15	12/12/22	
	16	19/12/22	Christmas Holiday
	17	26/12/22	Christmas Holiday
	18	02/01/23	Christmas Holiday

5	19	09/01/23	<u>Metals</u> – Metal reactivity, metal uses and extraction focussing on Iron. The chemistry of Group 1 metals
	20	16/01/23	
	21	23/01/23	
6	22	30/01/23	<u>Bonding & Structure</u> – the ways that atoms bond together and why they do so in a particular way. A look at the structures formed from the various types of bonding
	23	06/02/23	
	24	13/02/23	
	25	20/02/23	Half Term
6	26	27/02/23	<u>Bonding & Structure (Cont.)</u>
7	27	06/03/23	<u>Acids, bases & Salts</u> – A more in depth look at acids, including acid theory. Neutralisation techniques including Titrations and the formation of Salts. Some identification techniques, Ionic equations
	28	13/03/23	
	29	20/03/23	
	30	27/03/23	
	31	03/04/23	Easter Holiday
	32	10/04/23	Easter Holiday
	33	17/04/23	Easter Holiday
8	34	24/04/23	<u>Practical considerations 1</u> – A look at apparatus, measuring, recording and drawing graphs. A look at some Paper 6 questions
	35	01/05/23	
	36	08/05/23	Revise & catch up
	37	15/05/23	
	38	22/05/23	Exam
	39	29/05/23	Half Term
9	40	05/06/23	<u>Carbon 1</u> – Hydrocarbon families, their structure & naming, Fuels, looking at the distillation of crude oil and uses of each fraction
	41	12/06/23	
	42	19/06/23	
	43	26/06/23	
NSW Summer holiday period – 3 July – 4 September 2023			
10	1	04/09/23	<u>Chemical maths 1</u> – The CORE work only including Atomic mass, formula mass, reacting mass, % yield,
	2	11/09/23	

11	3	18/09/23	<u>Physical Chemistry</u> – Rates of reaction, Chemical energetics and reversible reactions and Equilibrium
	4	25/09/23	
	5	02/10/23	
12	6	09/10/23	<u>Chemical maths 2</u> This is the EXTENDED work and includes empirical formula, moles, molar volume, molar solutions
	7	16/10/23	
	8	23/10/23	Half Term
12	9	30/10/23	<u>Chemical maths 2</u> (Cont.)
	10	06/11/23	
13	11	13/11/23	Electrolysis – passing electricity through solutions, production of Aluminium, more ionic equations. REDOX
	12	20/11/23	
	13	27/11/23	
	14	04/12/23	
	15	11/12/23	Revise & catch up
	16	18/12/23	Christmas Holiday
	17	25/12/23	Christmas Holiday
	18	01/01/24	Christmas Holiday
14	19	08/01/24	<u>Identification</u> – bring all identification of gases, cations, anions, metals together
	20	15/01/24	
15	21	22/01/24	Nitrogen & Sulphur – Ammonia, Nitrates, Fertilisers. Sulfuric acid production. Properties of Sulfuric acid
	22	39/01/24	
	23	05/02/24	Revise & catch up
	24	12/02/24	MOCK
	25	19/02/24	Half Term
16	26	26/02/24	<u>Carbon 2</u> – More Organic families, the Alcohols, Carboxylic acids, Esters. Polymers, synthetic and natural
	27	04/03/24	
	28	11/03/24	
17	29	18/03/24	<u>Practical Considerations 2</u> – Looking at Paper 6 questions
	30	25/03/24	Easter Holiday
	31	01/04/24	Easter Holiday
	32	08/04/24	Easter Holiday
	33	15/04/24	
	34	22/04/24	
	35	19/04/24	

	36	06/05/24	
	37	13/05/24	
	38	20/05/24	
	39	27/05/24	Half Term
	40	03/06/24	
	41	10/06/24	
	42	17/06/24	
	43	24/06/24	