

## 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 24 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	07/09/20	<u>States &amp; 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	14/09/20	
	3	21/09/20	
2	4	28/09/20	<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	05/10/20	
	6	12/10/20	
	7	19/10/20	
	8	26/10/20	Half Term
3	9	02/11/20	<u>Air, water &amp; Land</u> – the Carbon cycle and Limestone. Air and Oxygen, including atmospheric pollution. Water, its purification, its uses and its availability
	10	09/11/20	
	11	16/11/20	
4	12	23/11/20	<u>Atomic Structure &amp; 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	30/11/20	
	14	07/12/20	
	15	14/12/20	
	16	21/12/20	Christmas Holiday
	17	28/12/20	Christmas Holiday
	18	04/01/21	Christmas Holiday

5	19	11/01/21	<u>Metals</u> – Metal reactivity, metal uses and extraction focussing on Iron. The chemistry of Group 1 metals
	20	18/01/21	
	21	25/01/21	
6	22	01/02/21	<u>Bonding &amp; 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	08/02/21	
	24	15/02/21	Half Term
6	25	22/02/21	<u>Bonding &amp; Structure (Cont.)</u>
	26	01/03/21	
7	27	08/03/21	<u>Acids, bases &amp; 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	15/03/21	
	29	22/03/21	
	30	29/03/21	Easter Holiday
	31	05/04/21	Easter Holiday
	32	12/04/21	Easter Holiday
7	33	19/04/21	<u>Acids, bases &amp; Salts (Cont.)</u>
8	34	26/04/21	<u>Practical considerations 1</u> – A look at apparatus, measuring, recording and drawing graphs. A look at some Paper 6 questions
	35	03/05/21	
	36	10/05/21	Revise & catch up
	37	17/05/21	
	38	24/05/21	Exam
	39	31/05/21	Half Term
9	40	07/06/21	<u>Carbon 1</u> – Hydrocarbon families, their structure & naming, Fuels, looking at the distillation of crude oil and uses of each fraction
	41	14/06/21	
	42	21/06/21	
	43	28/06/21	
NSW Summer holiday period – 5 July – 3 September 2021			
10	1	06/09/21	<u>Chemical maths 1</u> – The CORE work only including Atomic mass, formula mass, reacting mass, % yield,
	2	13/09/21	
11	3	20/09/21	<u>Physical Chemistry</u> – Rates of reaction, Chemical energetics and reversible reactions and Equilibrium
	4	27/09/21	
	5	04/10/21	

12	6	11/10/21	<u>Chemical maths 2</u> This is the EXTENDED work and includes empirical formula, moles, molar volume, molar solutions
	7	18/10/21	
	8	25/10/21	Half Term
12	9	01/11/21	<u>Chemical maths 2</u> (Cont.)
	10	08/11/21	
13	11	15/11/21	Electrolysis – passing electricity through solutions, production of Aluminium, more ionic equations. REDOX
	12	22/11/21	
	13	29/11/21	
	14	06/12/21	
	15	13/12/21	Revise & catch up
	16	20/12/21	Christmas Holiday
	17	27/12/21	Christmas Holiday
	18	03/01/22	Christmas Holiday
14	19	10/01/22	<u>Identification</u> – bring all identification of gases, cations, anions, metals together
	20	17/01/22	
15	21	24/01/22	Nitrogen & Sulphur – Ammonia, Nitrates, Fertilisers. Sulfuric acid production. Properties of Sulfuric acid
	22	31/01/22	
	23	07/02/22	Revise & catch up
	24	14/02/22	MOCK
	25	21/02/22	Half Term
16	26	28/02/22	<u>Carbon 2</u> – More Organic families, the Alcohols, Carboxylic acids, Esters. Polymers, synthetic and natural
	27	07/03/22	
	28	17/03/22	
17	29	21/03/22	<u>Practical Considerations 2</u> – Looking at Paper 6 questions
	30	28/03/22	
	31	04/04/22	Easter Holiday
	32	11/04/22	Easter Holiday
	33	18/04/22	Easter Holiday
	34	25/04/22	
	35	02/05/22	
	36	09/05/22	
	37	16/05/22	
	38	23/05/22	

	39	30/05/22	Half Term
	40	06/06/22	
	41	13/06/22	
	42	20/06/22	
	43	27/06/22	