



IA-Level Chemistry

September 21 Intake

Start Date:	06-Sep-21
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	Week Number	Week Commencing Date	Topic	Subtopic	Video Lesson and MCQs	Drop in Session Date	Drop in Session Time	Notes	Tutor Marked
Year 1	1	06-Sep-21	Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Atoms, elements and molecules	09/09/21	12:00-12:40	Formulae, Equations and Amount of Substance - Part 1	
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Writing chemical equations				
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Reactions of acids			Formulae, Equations and Amount of Substance - Part 2	
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Displacement reactions				
	2	13-Sep-21	Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Precipitation reactions	16/09/21	12:00-12:40	Formulae, Equations and Amount of Substance - Part 3	
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Moles and masses				
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Reacting masses				
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Percentage yield				
	3	20-Sep-21	Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Atom economy	23/09/21	12:00-12:40	Formulae, Equations and Amount of Substance - Part 4	
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Empirical and molecular formulae				
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Concentration			Formulae, Equations and Amount of Substance - Part 5	
			Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Gas volumes				

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	4	27-Sep-21	Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Measurement of the molar volume of a gas - Practical	30/09/21	12:00-12:40	Atomic structure and the periodic table - Part 1	
			Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Structure of atoms and isotopes				
			Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Mass spec				
			Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Orbitals				
	5	04-Oct-21	Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Ionisation energies	07/10/21	12:00-12:40	Atomic structure and the periodic table - Part 2	
			Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	The periodic table				
			Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Periodic properties			Bonding and structure - Part 1	
			Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Ionic bonding				
	6	11-Oct-21	Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Ionic radii and polarisation	14/10/21	12:00-12:40	Bonding and structure - Part 2	
			Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Physical properties				
			Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Covalent bonding				
			Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Electronegativity and bond polarity				

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7	18-Oct-21	Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Simple molecules	21/10/21	12:00-12:40	Bonding and structure - Part 3		
		Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Dative bonds					
		Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Shapes of molecules					
		Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Polar and non-polar molecules					
Holiday 25/10/21 - 31/10/21									
8	01-Nov-21	Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Metallic bonding	04/11/21	12:00-12:40	Bonding and structure - Part 4		
		Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Solid lattices					
		Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Intro to organic chemistry			Introductory Organic Chemistry and Alkanes - Part 1		
		Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Types of formulae					
9	08-Nov-21	Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Homologous series and functional groups	11/11/21	12:00-12:40			
		Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Nomenclature					
		Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Structural isomers					
		Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Types of reactions					


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	10	15-Nov-21	Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Hazards	18/11/21	12:00-12:40	Introductory Organic Chemistry and Alkanes - Part 2	
			Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Alkane from crude oil				
			Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Alkanes as fuel				
			Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Alternative fuels				
	11	22-Nov-21	Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Substitution reactions	25/11/21	12:00-12:40	Introductory Organic Chemistry and Alkanes	
			Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Bonding				
			Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Geometric isomerism			Alkenes - Part 1	
			Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Addition reactions				
	12	29-Nov-21	Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Mechanisms	02/12/21	12:00-12:40	Alkenes - Part 2	
			Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Polymerisation reactions				
			Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Polymer waste				
			Structure, Bonding and Introduction to Organic Chemistry		End of Unit				
	13	06-Dec-21	Structure, Bonding and Introduction to Organic Chemistry		End of Unit	09/12/21	12:00-12:40		End of unit


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14	13-Dec-21	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Introduction	16/12/21	12:00-12:40	Energetics - Part 1		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Enthalpy					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Enthalpy level diagrams			Energetics - Part 2		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Combustion, neutralisation and formation					
Holiday 20/12/21 - 09/01/22									
15	10-Jan-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Hess's law	13/01/22	12:00-12:40	Energetics - Part 3		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Bond Enthalpies					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Determination of the enthalpy change of a reaction using Hess's Law. - Practical			Intermolecular forces		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Intermolecular forces	Intermolecular interactions					
16	17-Jan-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Intermolecular forces	Properties	20/01/22	12:00-12:40	Redox Chemistry and Groups 1, 2 and 7 - Part 1		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Electrons					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Oxidation number					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Nomenclature					
17	24-Jan-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Full ionic equations	27/01/22	12:00-12:40	Redox Chemistry and Groups 1, 2 and 7 - Part 2		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Trends in groups 1 & 2					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Group 1 reactions					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Group 2 reactions					
18	31-Jan-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Oxides and hydroxides	03/02/22	12:00-12:40			
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Thermal stability					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Flame tests					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Concentration of a solution of hydrochloric acid _ Practical					


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19	07-Feb-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Preparation of a standard solution from a solid acid and use it to find the concentration of a solution of sodium hydroxide. - Practical	10/02/22	12:00-12:40	Redox Chemistry and Groups 1, 2 and 7 - Part 3		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Trends in group 7					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Halides reactions					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Making standard solutions					
Holiday 14/2/22 -20/02/22									
20	21-Feb-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Titration	24/02/22	12:00-12:40	Introduction to Kinetics and Equilibria - Part 1		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Errors, precision, accuracy					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	Reaction rates					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	factors					
21	28-Feb-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	reversible reactions	03/03/22	12:00-12:40	Introduction to Kinetics and Equilibria - Part 2		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	Conditions					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	Reversible reactions in industry			Organic Chemistry: Halogenoalkanes, Alcohols and Spectra - Part 1		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	General principles					
22	07-Mar-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Hydrolysis reactions	10/03/22	12:00-12:40	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra - Part 2		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Mechanisms					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Investigation of the rates of hydrolysis of some halogenoalkanes. - Practical					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Chlorination of 2-methylpropan-2-ol with concentrated hydrochloric acid. - Practical					

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23	14-Mar-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Alcohols and the reactions	17/03/22	12:00-12:40	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra - Part 3		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Oxidation					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Purifying an organic liquid					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	The oxidation of propan-1-ol to produce propanal and propanoic acid. - Practical					
24	21-Mar-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Mass spec	24/03/22	12:00-12:40	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra - Part 4		
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	IR					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Analysis of some inorganic and organic unknowns. - Practical					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra						
25	28-Mar-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols		End of Unit	31/03/22	12:00-12:40		End of unit	
Holiday 04/04/22 - 24/04/22									
26	25-Apr-22	Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Recap	28/04/22	12:00-12:40		Mock Exam	
		Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Recap					
27	02-May-22	Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Recap	05/05/22	12:00-12:40			
		Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Recap					
28	09-May-22	Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Recap	12/05/22	12:00-12:40			
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Recap					

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	29	16-May-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Intermolecular forces	Recap	19/05/22	12:00-12:40			
			Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Recap					
	30	23-May-22	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	Recap	26/05/22	12:00-12:40			
			Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Recap					
	Holiday 30/05/21 - 05/06/22									
	31	06-Jun-22	Self directed revision Exam period				09/06/22	12:00-12:40	Self directed revision Exam period	
	32	13-Jun-22				16/06/22	12:00-12:40			
	33	20-Jun-22				23/06/22	12:00-12:40			
	34	27-Jun-22				30/06/22	12:00-12:40			
	35	04-Jul-22				07/07/22	12:00-12:40			
	36	11-Jul-22				14/07/22	12:00-12:40			
	Holiday 18/07/22 -04/09/22									
	Year 2	1	05-Sep-22	Rates, Equilibria and Further Organic Chemistry	Kinetics	Techniques for measuring the rate of reaction	08/09/22	13:00-13:40	Further kinetics	
Rates, Equilibria and Further Organic Chemistry				Kinetics	Rate equations					
Rates, Equilibria and Further Organic Chemistry				Kinetics	Order of reactions					
Rates, Equilibria and Further Organic Chemistry				Kinetics	Mechanisms					
2		12-Sep-22	Rates, Equilibria and Further Organic Chemistry	Kinetics	Ea and catalysis	15/09/22	13:00-13:40			
			Rates, Equilibria and Further Organic Chemistry	Kinetics	Effect of temp on rate constant					
			Rates, Equilibria and Further Organic Chemistry	Kinetics	Rate of the iodine-propanone reaction by a titrimetric method and investigating a 'clock reaction' - Practical					
			Rates, Equilibria and Further Organic Chemistry	Kinetics	Finding the activation energy of a reaction. - Practical					

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3	19-Sep-22	Rates, Equilibria and Further Organic Chemistry	Entropy and Energetics	Introduction	22/09/22	13:00-13:40	Entropy and energetic - Part 1		
		Rates, Equilibria and Further Organic Chemistry	Entropy and Energetics	Total entropy					
		Rates, Equilibria and Further Organic Chemistry	Entropy and Energetics	Entropy changes			Entropy and energetic - Part 2		
		Rates, Equilibria and Further Organic Chemistry	Entropy and Energetics	Born-Harber cycles					
4	26-Sep-22	Rates, Equilibria and Further Organic Chemistry	Entropy and Energetics	Enthalpy changes of solution and hydration	29/09/22	13:00-13:40	Chemical equilibria		
		Rates, Equilibria and Further Organic Chemistry	Chemical Equilibria	Kc					
		Rates, Equilibria and Further Organic Chemistry	Chemical Equilibria	Kp					
		Rates, Equilibria and Further Organic Chemistry	Chemical Equilibria	Factors affecting equilibrium constants					
5	03-Oct-22	Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Bronsted-lowry theory	06/10/22	13:00-13:40	Acid-base equilibria - Part 1		
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Hydrogen ion conc					
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Kw					
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Data from pH measurements					
6	10-Oct-22	Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Acid-base titrations	13/10/22	13:00-13:40	Acid-base equilibria - Part 2		
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Buffer solutions					
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	pH curves					
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Finding the Ka value for a weak acid. - Practical					
7	17-Oct-22	Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Chirality	20/10/22	13:00-13:40	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality - Part 1		
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Optical activity					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Reaction mechanisms					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Carbonyl compounds					

Holiday 24/10/22 - 30/10/22


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8	31-Oct-22	Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Redox reactions	03/11/22	13:00-13:40	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality - Part 3		
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Nucleophilic addition reactions					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Carboxylic acids					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Reactions of carboxylic acids					
9	07-Nov-22	Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Acyl chlorides	10/11/22	13:00-13:40	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality - Part 4		
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Esters					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Polyesters			Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality - Part 5		
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Simple chromatography					
10	14-Nov-22	Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Mass spec	17/11/22	13:00-13:40			
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	HPLC and GC					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	More mass spec					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	NMR					
11	21-Nov-22	Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	C-13 NMR	24/11/22	13:00-13:40			
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	H-1 NMR					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Splitting patterns					
		Rates, Equilibria and Further Organic Chemistry		End of Unit					
12	28-Nov-22	Rates, Equilibria and Further Organic Chemistry		End of Unit	01/12/22	13:00-13:40		End of unit	
13	05-Dec-22	Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Standard electrode potentials	08/12/22	13:00-13:40	Redox equilibria - Part 1 and 2		
		Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Electrochemical cells					
		Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Thermodynamic feasibility					
		Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Fuel cells					


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14	12-Dec-22	Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Redox titrations	15/12/22	13:00-13:40			
		Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Investigating some electrochemical cells. - Practical					
		Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	iron(II) ions and potassium manganate(VII) titration - Practical					
		Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	sodium thiosulfate and iodine - Practical					
Holiday 19/12/22 - 08/01/23									
15	09-Jan-23	Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Electronic configuration	12/01/23	13:00-13:40	Transition metals and their chemistry - Part 1		
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Ligands and complexes					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Colour complexes					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Shapes					
16	16-Jan-23	Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Square planar	19/01/23	13:00-13:40	Transition metals and their chemistry - Part 2		
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Multidentate ligands					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Reactions					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Cobalt and iron					
17	23-Jan-23	Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Chromium	26/01/23	13:00-13:40			
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Manganese					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Vanadium					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Nickel and zinc					
18	30-Jan-23	Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	The preparation of a transition metal complex. - Practical	02/02/23	13:00-13:40	Transition metals and their chemistry - Part 3		
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Heterogeneous catalysis					
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Homogeneous catalysis			Arenes		
		Transition Metals and Organic Nitrogen Chemistry	Organic Chemistry – Arenes	Benzene					


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19	06-Feb-23	Transition Metals and Organic Nitrogen Chemistry	Organic Chemistry – Arenes	Reaction of benzene	09/02/23	13:00-13:40	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins		
		Transition Metals and Organic Nitrogen Chemistry	Organic Chemistry – Arenes	Electrophilic substitution					
		Transition Metals and Organic Nitrogen Chemistry	Organic Chemistry – Arenes	Phenol					
		Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Amines					
Holiday 13/2/23 -19/02/23									
20	20-Feb-23	Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Acid-base reactions of amines	23/02/23	13:00-13:40			
		Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	other reactions					
		Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Amides and polyamides					
		Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Amino acids					
21	27-Feb-23	Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Peptides and proteins	02/03/23	13:00-13:40	Organic sythesis		
		Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Analysis of some inorganic and organic unknowns - Practical					
		Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	Organic anaylsis					
		Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	Organic synthesis					
22	06-Mar-23	Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	Hazards	09/03/23	13:00-13:40			
		Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	Practical techniques					
		Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	The preparation of aspirin. - Practical					
		Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	End of Unit					
23	13-Mar-23	Transition Metals and Organic Nitrogen Chemistry		End of Unit	16/03/23	13:00-13:40		End of unit	

IA-Level Chemistry
September 21 Intake

	Week Number	Week Commencing Date	Topic	Subtopic	Video Lesson and MCQs	Drop in Session Date	Drop in Session Time	Notes	Tutor Marked
24	20-Mar-23	Structure, Bonding and Introduction to Organic Chemistry	Formulae, Equations and Amount of Substance	Recap	23/03/23	13:00-13:40			
		Structure, Bonding and Introduction to Organic Chemistry	Atomic structure and the periodic table	Recap					
		Structure, Bonding and Introduction to Organic Chemistry	Bonding and structure	Recap					
25	27-Mar-23	Structure, Bonding and Introduction to Organic Chemistry	Introductory Organic Chemistry and Alkanes	Recap	30/03/23	13:00-13:40			
		Structure, Bonding and Introduction to Organic Chemistry	Alkenes	Recap					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Energetics	Recap					
Holiday 03/04/23 - 23/04/23									
26	24-Apr-23	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Intermolecular forces	Recap	27/04/23	13:00-13:40		Mock Exam	
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Redox Chemistry and Groups 1, 2 and 7	Recap					
		Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Introduction to Kinetics and Equilibria	Recap					
27	01-May-23	Energetics, Group Chemistry, Halogenoalkanes and Alcohols	Organic Chemistry: Halogenoalkanes, Alcohols and Spectra	Recap	04/05/23	13:00-13:40			
		Rates, Equilibria and Further Organic Chemistry	Kinetics	Recap					
		Rates, Equilibria and Further Organic Chemistry	Entropy and Energetics	Recap					
28	08-May-23	Rates, Equilibria and Further Organic Chemistry	Chemical Equilibria	Recap	11/05/23	13:00-13:40			
		Rates, Equilibria and Further Organic Chemistry	Acid-base equilibria	Recap					
		Rates, Equilibria and Further Organic Chemistry	Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	Recap					
29	15-May-23	Transition Metals and Organic Nitrogen Chemistry	Redox Equilibria	Recap	18/05/23	13:00-13:40			
		Transition Metals and Organic Nitrogen Chemistry	Transition metals and the chemistry	Recap					
		Transition Metals and Organic Nitrogen Chemistry	Organic Chemistry – Arenes	Recap					

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	Week Number	Week Commencing Date	Topic	Subtopic	Video Lesson and MCQs	Drop in Session Date	Drop in Session Time	Notes	Tutor Marked	
	30	22-May-23	Transition Metals and Organic Nitrogen Chemistry	Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins	Recap	25/05/23	13:00-13:40			
			Transition Metals and Organic Nitrogen Chemistry	Organic Synthesis	Recap					
	Holiday 29/05/23 - 04/06/23									
	31	05-Jun-23	Self directed revision Exam period					Self directed revision Exam period		
	32	12-Jun-23								
	33	19-Jun-23								
	34	26-Jun-23								
35	03-Jul-23									
36	10-Jul-23									