

Curriculum Map 2021-2022: Year 12 Chemistry

Year Overview

	Teacher 1: MBI (2 lessons per week)	Teacher 2:USM / KJN (4 lessons per week)
Autumn 1	Organic: Intro to organic Alkanes	Physical: Atomic structure Physical: Amount of substance
Autumn 2	Organic: Halogenoalkanes Organic: Alkenes	Physical: Bonding Physical: Energetics
Spring 1	Organic: Alcohols	Physical: Kinetics
Spring 2	Organic: Organic analysis	Inorganic: Periodicity, period 3, group 2 and group 7
Summer 1	Revision and Exam prep	Revision and Exam prep
Summer 2	Revision and Exam prep	Revision and Exam prep

Outline of Lessons

			Teacher 1 (X2 lessons per week)	Teacher 2 (X4 lessons per week)	Homework	Assessment
Autumn 1	30/08/2021	Week 1				
	06/09/2021	Week 2				
	13/09/2021	Week 3	Organic-Intro to Organic: Nomenclature	Physical-Atomic structure: Intro to Atomic structure	Exam questions / Revision and reading	
				Physical -Atomic structure: Mass spectrometry		
	20/09/2021	Week 4	Organic -Intro to Organic: Structural isomerism	Physical -Atomic structure: Electronic configuration and 1 st ionisation energy	Exam questions / Revision and reading	Physical -Atomic structure: Test
				Physical -Atomic structure: Test		
	27/09/2021	Week 5	Organic -Intro to Organic: Geometric isomerism	Physical -Atomic structure: Feedback and DIRT	Exam questions / Revision and reading	
				Physical-Amount of substance: RAM, RMM, Moles		
04/10/2021	Week 6	Organic -Alkanes: Fractional distillation and cracking	Physical -Amount of substance: Ideal Gas Law	Exam questions / Revision and reading		
			Physical -Amount of substance: Empirical and Molecular formula			
11/10/2021	Week 7	Organic -Alkanes: Combustion	Physical -Amount of substance: Balancing equations	Exam questions / Revision and reading		
			Physical -Amount of substance: Reacting masses			
18/10/2021	Week 8	Organic -Alkanes: Free radical substitution	Physical -Amount of substance: Percentage yield and Atom economy	Exam questions / Revision and reading		
			Physical -Amount of substance: Solutions and Titrations			
Autumn 2	01/11/2021	Week 9	Organic -Alkanes: Free radical Substitution	Physical -Amount of substance: REQUIRED PRACTICAL (Volumetric solution and titration)	Exam questions / Revision and reading	CPAC REQUIRED PRACTICAL (Volumetric solution and titration)
				Physical -Amount of substance: Test		

	08/11/2021	Week 10	Organic -Intro to Organic and Alkanes: Test	Physical -Amount of substance: Feedback and DIRT Physical -Bonding: Ionic bonding	Exam questions / Revision and reading	Physical -Amount of substance: Test Organic -Intro to Organic and Alkanes: Test
	15/11/2021	Week 11	Organic Intro to Organic and Alkanes: Feedback and DIRT	Physical -Bonding: Covalent bonding Physical -Bonding: Metallic bonding	Exam questions / Revision and reading	
	22/11/2021	Week 12	Organic -Halogenoalkanes: Nucleophilic substitution	Physical -Bonding: Shapes of molecules Physical -Bonding: Bond polarity	Exam questions / Revision and reading	
	29/11/2021	Week 13	Organic -Halogenoalkanes: Elimination	Physical -Bonding: Intermolecular forces Physical -Bonding: Test	Exam questions / Revision and reading	Physical -Bonding: Test
	06/12/2021	Week 14	Organic -Halogenoalkanes: Assessment and DIRT	Physical -Bonding: Feedback and DIRT Physical Energetics: Enthalpy change	Exam questions / Revision and reading	
	13/12/2021	Week 15	Organic -Alkenes: Structure and Reactivity	Physical -Energetics: Calorimetry Physical-Energetics: REQUIRED PRACTICAL: (Measuring enthalpy change)	Exam questions / Revision and reading	CPAC: Physical -Energetics: REQUIRED PRACTICAL: (Measuring enthalpy change)
Spring 1	03/01/2022	Week 16	Organic -Alkenes: Electrophilic addition	Physical -Energetics: Hess' Law Physical -Energetics: Hess's Law	Exam questions / Revision and reading	
	10/01/2022	Week 17	Organic -Alkenes: Addition polymers	Physical -Energetics: Bond Enthalpies Physical -Energetics: Test	Exam questions / Revision and reading	Physical -Energetics: Test
	17/01/2022	Week 18	Organic -Alkenes: Test	Physical -Energetics: Feedback and Dirt Physical -Kinetics: Collision theory and Maxwell-Boltzmann	Exam questions / Revision and reading	Organic -Alkenes: Test)
	24/01/2022	Week 19	Organic -Alkenes: Feedback and DIRT	Physical -Kinetics: Factors affecting rate of reaction Physical -Kinetics: Catalysts	Exam questions / Revision and reading	
	31/01/2022	Week 20	Organic -Alcohols: Production of alcohols	Physical -Kinetics: REQUIRED PRACTICAL: (rate of reaction) Physical -Kinetics: Test	Exam questions / Revision and reading	CPAC: REQUIRED PRACTICAL: (rate of reaction) Physical -Kinetics: Test
	07/02/2022	Week 21	Organic -Alcohols: Oxidation of alcohols	Physical -Kinetics: Feedback and DIRT Inorganic-Periodicity: Period 3 Trends	Exam questions / Revision and reading	
	14/02/2022	Week 22	Organic -Alcohols: REQUIRED PRACTICAL (Distillation)	Inorganic -Group 2: Trends of group 2 Inorganic -Group 2: Uses of group 2	Exam questions / Revision and reading	CPAC: Organic -Alcohols: REQUIRED PRACTICAL (Distillation)

Spring 2	28/02/2022	Week 23	Organic -Alcohols: REQUIRED PRACTICAL (Distillation)	Inorganic -Group 7: Uses of Chlorine Inorganic I-Group 7: Reducing ability	Exam questions / Revision and reading	
	07/03/2022	Week 24	Organic -Alcohols: Test	Inorganic -Group 7: REQUIRED PRACTICAL: (Test tube reactions on cations and anions) Inorganic -Periodicity, Group 2, Group 7: Test	Exam questions / Revision and reading	CPAC: Inorganic -Group 7: REQUIRED PRACTICAL: (Test tube reactions on cations and anions) Inorganic -Periodicity, Group 2, Group 7: Test Organic -Alcohols: Test
	14/03/2022	Week 25	Organic -Alcohols: Feedback and DIRT	Inorganic -Periodicity, Group 2, Group 7: Feedback and DIRT Revision and exam prep	Exam questions / Revision and reading	
	21/03/2022	Week 26	Organic -Organic analysis: Analysis of functional groups	Revision and exam prep Revision and exam prep	Exam questions / Revision and reading	
	28/03/2022	Week 27	Organic -Organic analysis: REQUIRED PRACTICAL: Tests for alcohol, aldehyde, alkene and carboxylic acid	Revision and exam prep Revision and exam prep	Exam questions / Revision and reading	CPAC: Organic -Organic analysis: REQUIRED PRACTICAL: Tests for alcohol, aldehyde, alkene and carboxylic acid
	04/04/2022	Week 28	Organic -Organic analysis: Mass spectrometry	Revision and exam prep Revision and exam prep	Exam questions / Revision and reading	
Summer 1	25/04/2022	Week 29	Organic -Organic analysis: Infrared spectroscopy	Revision and exam prep Revision and exam prep	Exam questions / Revision and reading	
	02/05/2022	Week 30	Organic -Organic analysis: Test	Revision and exam prep Revision and exam prep	Exam questions / Revision and reading	Organic -Organic analysis: Test
	09/05/2022	Week 31	Organic -Organic analysis: Feedback and DIRT	Revision and exam prep Revision and exam prep	Exam questions / Revision and reading	
	16/05/2022	Week 32	Revision and exam prep	Revision and exam prep Revision and exam prep		
	23/05/2022	Week 33	Revision and exam prep	Revision and exam prep Revision and exam prep		
Summer 2	06/06/2022	Week 34	MOCK EXAM PERIOD			
	13/06/2022	Week 35	MOCK EXAM PERIOD			
	20/06/2022	Week 36	Revision and exam prep	Revision and exam prep Revision and exam prep		
	27/06/2022	Week 37	Revision and exam prep	Revision and exam prep Revision and exam prep		
	04/07/2022					

		Week 38				
	11/07/2022	Week 39				
	18/07/2022	Week 40				