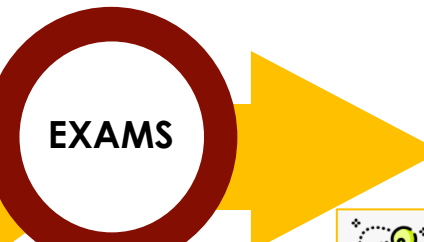


A-LEVEL CHEMISTRY LEARNING JOURNEY



Reactions of Period 3 Elements and their Oxides



Electrode potentials and electrochemical cells

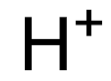


Required Practical 11



Acids and Bases

Required Practical 12



Chromatography



Amino Acids, Proteins and DNA

Thermodynamics

Required Practical 8

Transition metals & Reactions of inorganic aqueous ions

Required Practical 9

Organic Synthesis and Analysis

Required Practical 10

Carbonyl compounds – aldehydes & ketones, carboxylic acids, esters
Acyl chlorides and acid anhydrides

Amines



Polymers

Equilibria and K_p

Required Practical 7

Optical Isomerism

Benzene



Halogenoalkanes

Rate Equations

Required Practical 5 & 6

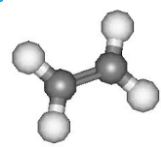
Alcohols



Organic Analysis



Alkenes



Introduction to Organic Chemistry and Alkanes

Required Practical 4

Group 2 – The Alkaline Earth Metals

Required Practical 2

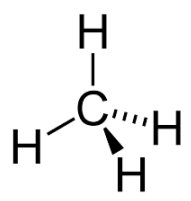
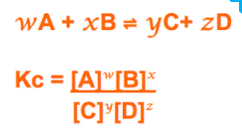
Kinetics

Required Practical 3

Group 7 – The Halogens

Energetics

Equilibria and K_c



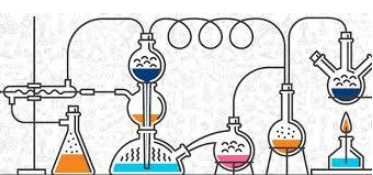
Periodicity

Required Practical 1

Bonding



Redox Reactions



Amount of Substance



Atomic Structure



A-LEVEL CHEMISTRY LEARNING JOURNEY

Year 12

	RHO x 5 per fortnight	GSR x 5 per fortnight
Autumn half term 1	Atomic Structure (P)	Amount of substance 3.1.2 (P)
		RP 1: Make up a volumetric solution and carry out a simple acid-base titration
	Bonding 3.1.3 (P)	
		Kinetics 3.1.5 (P)
		RP 3: Investigation of how the rate of a reaction changes with temperature
HALF TERM		
Autumn half term 2		Energetics 3.1.4 (P)
	Introduction to organic 3.3.1 (O)	
		RP 2: Measurement of an enthalpy change
	Alkanes (O)	Chemical equilibria 3.1.6 (P)
Christmas Holidays		
Spring half term 1	Halogenoalkanes (O)	
	Halogenoalkanes (O)	
		Oxidation and reduction 3.1.7
	Alkenes (O)	Periodicity 3.2.1 (In)
HALF TERM		
Spring half term 2		Group 2, alkaline earth metals 3.2.2 (In)
	Alcohols (O)	
		Group 7, the halogens 3.2.3 (In)
	RP 5: Distillation of a product from a reaction	
	Organic Analysis (O)	
EASTER HOLIDAYS		
Summer half term 1	RP 6: Tests for alcohol, aldehyde, alkene and carboxylic acid	RP4: Carry out simple test-tube reactions to identify cations and anions in aqueous solution
	Revision	Revision
	Revision	Revision
Inorganic and physical AS paper 1 Organic and Physical AS paper 2	Revision	Revision
HALF TERM		
Summer half term 2	Optical Isomerism (O)	Thermodynamics (P)
	Aldehydes and ketones (O)	
	Carboxylic acids and derivatives (O)	
FOCUS WEEK		

A-LEVEL CHEMISTRY LEARNING JOURNEY



Reactions of Period 3 Elements and their Oxides

EXAMS

Electrode potentials and electrochemical cells



Required Practical 11

OH^-



Acids and Bases

Required Practical 12

H^+



Chromatography



Amino Acids, Proteins and DNA

Thermodynamics

Required Practical 8

Transition metals & Reactions of inorganic aqueous ions

Required Practical 9

Organic Synthesis and Analysis

Required Practical 10

Carbonyl compounds – aldehydes & ketones, carboxylic acids, esters
Acyl chlorides and acid anhydrides

Amines



Polymers

Equilibria and K_p

Required Practical 7

Optical Isomerism

Benzene



Rate Equations

Required Practical 5 & 6

Alcohols

Halogenoalkanes

Year 13

Organic Analysis



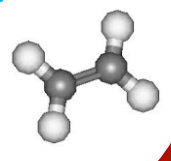
Alkenes

Group 2 – The Alkaline Earth Metals

Required Practical 2

Kinetics

Required Practical 3



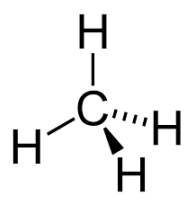
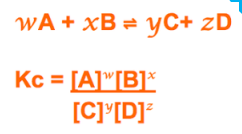
Introduction to Organic Chemistry and Alkanes

Required Practical 4

Group 7 – The Halogens

Energetics

Equilibria and K_c



Periodicity

Required Practical 1

Bonding



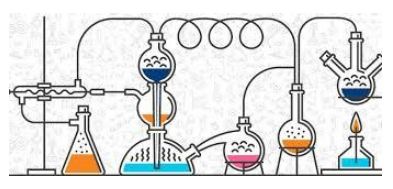
Redox Reactions

Year 12

Amount of Substance



Atomic Structure



A-LEVEL CHEMISTRY LEARNING JOURNEY

Year 13

	GSR x 5 a fortnight	RHO x 5 a fortnight
Autumn half term 1	Thermodynamics	Rates equations
	Acids and bases	RP: 7 Measuring the rate of a reaction by initial rate method
		Equilibrium constant and Kp
	Required practical 9: How pH changes	RP: 10 Preparation of a pure organic solid
	Electrode potentials and chemical cells	
HALF TERM		
Autumn half term 2		Optical Isomerism (O)
		Aldehydes and ketones
	RP: 8 Measuring the EMF of an electrochemical cell	
	Transition metals	
		Carboxylic acids and derivatives
		RP: 10 Preparation of a pure organic solid
Christmas Holidays		
HALF TERM		
spring half term 1		Aromatic chemistry
	Reactions of ions in aqueous solutions	
	RP11: Simple test tube reactions	Amines
	Properties of period 3 elements and their oxides	
HALF TERM		
Spring half term 2	Amino acids, proteins and DNA	
	Chromatography	Polymers
	RP: 12 Separation of species by thin-layer chromatography	
	Organic Synthesis	Nuclear magnetic resonance spectroscopy
REVISION		
EASTER HOLIDAYS		
REVISION		
Summer half term 1		
HALF TERM		
Inorganic and physical paper 1		
Organic and physical paper 2:		
Paper 3		