



	AUTUMN													SPRING												SUMMER													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Year 12	Topic – Atomic structure and amount of substance							Topic – kinetics						Topic – energetics				Topic – group 2, equilibria and kc					Topic – REDOX and group 7					Revision and Yr 12		Topic – Rates equations									
	Assessment – EoTTs, Jan exam, yr 12 and 13 exams							Assessment – EoTTs, Jan exam, yr 12 and 13 exams						Assessment – EoTTs, Jan exam, yr 12 and 13 exams				Assessment – EoTTs, Jan exam, yr 12 and 13 exams					Assessment – EoTTs, Jan exam, yr 12 and 13 exams					Exams (AS EXAMS)		Assessment – EoTTs, yr 13 exams									
	S -atomic structure, electron configuration, mass spec, moles, molarity, EF,gas equations, uncertainties							S-collision theory, maxwell Boltzmann						S-enthalpy, definitions, hess cycles, bond energies				S -Le Chatelier’s principle, Kc, group 2 sulfates and hydroxide, uses of compounds					S-half equations, oxidation states, physical properties, reactions of chlorine							S-orders of reactions, rate equations, logs									
	P –titrations, CAP1							P –rates practical’s, CAP3						P –enthalpy, definitions, hess cycles, bond energies				P –test tube reactions, Sk , data handling, mathematical skills, modelling,					P –test tube reactions, CAP 4							P –rates experiments, CAP 7									
	Sk – interpret and analyse spectra, sig fig, rearranging equations							Sk – Experimental skills, data handling, graphs, evaluation, mathematical skills, researching, planning.						P –energetics, CAP 2									Sk – Experimental skills, ethics debating							Sk – Experimental skills, data handling, rearranging complex equations, gradients, tangents, mathematical skills, researching, modelling, planning.									
	Topic – bonding and periodicity							Topic – introduction to organic chemistry and alkanes						Topic – haloalkanes				Topic – alkenes and alcohols					Topic – organic analysis					Revision and Yr 12		Topic – aromatic									
	Assessment – EoTTs, Jan exam, yr 12 and 13 exams							Assessment – EoTTs, Jan exam, yr 12 and 13 exams						Assessment – EoTTs, Jan exam, yr 12 and 13 exams				Assessment – EoTTs, Jan exam, yr 12 and 13 exams					Assessment – EoTTs, Jan exam, yr 12 and 13 exams					Exams (AS EXAMS)		Assessment – EoTTs, yr 13 exams									
	S-ionic, covalent, dative, metallic, VSEPR, polarity, properties of elements							S-IUPAC nomenclature, drawing structures, isomerism, cracking,combustion, chlorination						S-reactions, mechanisms, ozone,				S-reactions alkenes and alcohols, mechanisms, polymers					S-mass spec, IR,functional group tests							S - benzene, bonding and reactions									
	P –investigating properties							P –fractional distillation						P – testtube reactions				P –test tube reactions, fractional distillation, CAP5					P –CAP 6							P –nitration									
	Sk –deducing shapes of molecules and properties, identifying patterns							Sk –drawing structures, reasoning,						Sk –drawing mechanisms				Sk –drawing mechanisms, recording observations, research					Sk –data and spectra analysis, recording observations							Sk –experimental skills, drawing mechanisms									

Year 13	Topic – equilibria and K_p, acids and bases Assessment – EoTT, Jan exam and yr 13 exams S-partial pressures, mole fractions, K_p, logs, Bronsted lowry definitions, buffers, K_w, K_a, K_{sp}, pH curves, titration, indicators, P –experimental skills on all the above, CAP 9 Sk –mathematical skills, sig figs, graphs, data analysis	Topic –NMR and chromatography Assessment – EoTT, Jan exam and yr 13 exams S-NMR, chemical shifts, chromatography, R_f values P –TLC , CAP12 Sk –data and graph analysis, research, evaluating, mathematical skills	Revision and mock exam	Topic – Electrode potentials Assessment – EoTT and yr 13 exams S-electrode potentials, standard conditions, EMF, commercial applications, fuel cells P –test tube reactions, making cells, CAP 8 Sk – Research, mathematical skills, making predictions	Topic – thermodynamics Assessment – EoTT and yr 13 exams S-born haber cycles, ionic models, definitions, entropy, Gibbs free energy P –determine enthalpy Sk –deriving equations, graph analysis, modelling, mathematical skills	Revision	A2 Level Exams
	Topic – optical isomerism, aldehydes, ketones, carboxylic acids Assessment – EoTT, Jan exam and yr 13 exams S-optical isomerism, reactions and mechanisms of the above, acylation, biodiesel and esters P –test tube reactions, recrystallisation, CAP10 Sk –observations, drawing mechanisms	Topic – amine and polymers Assessment – EoTT, Jan exam and yr 13 exams S - aliphatic and aromatic amines, properties, condensation polymers P –making nylon Sk –experimental skills, drawing mechanisms	Topic – amino acids, proteins, DNA and organic synthesis Assessment – EoTT, Jan exam and yr 13 exams S-hydrolysis, enzymes, anticancer drugs chromatography, multi step synthesis routes P –chromatography Sk –calculations, drawing structures	Revision and mock exam	Topic – transition metals and reactions of aqueous ions Assessment – EoTT and yr 13 exams S -properties, ligands, reactions, shapes and colours of complex ions, catalysts P –test tube reactions, titrations, CAP 11 Sk –recording observations, mathematical skills, graph analysis	Topic –period 3 Assessment – EoTT and yr 13 exams S-trends and reactions of period 3 elements P –reactions of elements and pH testing Sk –data interpretation, identifying patterns	