Long Term Plan Subject: AQA Chemistry YEAR 13

Term	Topic(s)	Assessed work	Additional details
1 a 7 weeks 42 lessons	25.1 Optical isomerism 25.3 Synthesis of optically active compounds 26.3 carboxylic acids and esters 26.4 Reactions of carboxylic acids and esters 28.1 Intro to amines 28.2 Properties of amines as bases 28.3 Amines as nucleophiles and their synthesis 26.5 Acylation 30.1 Intro to amino acids 30.2 Peptides, polymers and proteins 30.3 Enzymes 30.4 DNA 30.5 The action of anti-cancer drugs 29.1 Condensation polymers 32.1 NMR 32.2 Proton NMR 32.3 Interpreting spectra Required practical: Preparation of an organic solid and a test of its purity; Preparation of a pure organic liquid 25.1 Naming organic compounds 33.1 Chromatography Required practical: Separation of species by thin layer chromatography 21.1 Defining an acid 21.2 pH scale 17.1 Enthalpy changes 17.2 Born-Haber cycles	Mid-topic test set as H/W during week 4	Note: Topic numbers refer to chapters in the AQA 'A' level Chemistry textbook
1b 7 weeks 42 lessons	Revision for mock exam 17.3 More enthalpy changes 17.4 Why do chemical changes occur? 21.3 Weak acids and bases 21.4 Acid-base titrations 21.5 Choice of indicators for titrations 21.6 Buffer solutions Required practical: Investigate how pH changes when a weak acid reacts with a strong base	***8/11/21 –mock exams begin (no taught curriculum)***	

2a 7 weeks 42 lessons	20.1 The electrochemical series 20.2 Predicting the direction of redox reactions 20.3 Electrochemical cells Required practical: Measuring the EMF of an electrochemical cell 23.1 General properties of transition metals 23.2 Complex formation and the shape of complex ions 23.3 Coloured ions 23.4 Variable oxidation states of transition elements 23.5 Catalysts 24.1 The acid-base chemistry of aqueous transition metal ions 24.2 Ligand substitution reactions Required practical: Carry out simple test tube reactions to identify transition metal ions in aqueous solutions 27.1 Introduction to arenes 27.2 Arenes- physical properties, naming and reactivity	Mid-topic test set as H/W during week 4	
2b 5 weeks 30 lessons	27.3 Reactions of arenes 31.1 Synthetic routes 31.2 Organic analysis Revision for final A level exam Past-paper question	**Second mock exam will take place during this half-term- date TBC**	
3a 5 weeks 30 lessons	Revision for final A level exam Past-paper question		
3b			