

Year 10 Chemistry- Curriculum Overview

Half Term:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics:	4.2 Bonding structures and properties of matter 4.2.1 Chemical bonds, ionic, covalent and metallic 4.2.2 How bonding and structure are related to the properties of substances 4.2.3 Structure and bonding of carbon	4.4 Chemical changes – Electrolysis RP3 - Electrolysis	4.3 Quantitative chemistry 4.3.1 Chemical measurements, conservation of mass and the quantitative interpretation of chemical equations 4.5 Energy changes 4.5.1 Exothermic and endothermic reactions RP4 – Energy changes	4.8 Chemical analysis 4.8.1 Purity, formulation and chromatography 4.8.2 Identification of gases 4.8.3 Identification of ions by chemical and spectroscopic means Revision for mock exams RP6 – Chromatography RP7 – Testing for ions	4.10 Using Resources 4.10.1 Using the Earth's resources and obtaining potable water 4.10.2 Life cycle assessment and recycling RP8 – Analysis of water	Chemistry Only Content 4.2 Bonding structure and the properties of matter 4.2.4 Bulk and surface properties of matter including nanoparticles 4.1 Atomic structure and the periodic table 4.1.3 Properties of transition metals 4.5.2 Energy Changes 4.5.2 Chemical cells and fuels cells 4.10 Using Resources 4.10.3 Using materials 4.7 Organic Chemistry 4.7.1 Carbon compounds as fuels and feedstock
Assessment & End Points:	Structures, bonding and properties test. STAR tasks: Ionic compounds, Structures summary	Electrolysis Test Electrolysis STAR questions RP3 - Electrolysis STAR Assessment	Quantitative Chemistry and Energy changes Test Energy in reactions STAR questions RP4 -Energy changes STAR Assessment	Chemical analysis test: STAR Tasks: Chromatography, RP6 practical write up, RP7 practical write up,	Using resources test, Chemistry only topics test, Mock exams	Chemistry Only content test, Organic Chemistry test, STAR task: Fractional distillation