	BIOLOGY		CHEMISTRY		PHYSICS	
w/c	***Lesson & links to other areas of the course***	***Additional resources e.g. website links & videos***	***Lesson & links to other areas of the course***	***Additional resources e.g. website links & videos***	***Lesson & links to other areas of the course***	***Additional resources e.g. website links & videos***
28-Feb	**MOCKS**					
07-Mar						
14-Mar	**MOCK FEEDBACK**					
21-Mar	**Levels of Organisation/Required Practical 7/**	Video - Cells, tissues, organs & organ systems Video Required practical 7 'reaction time' Exam question	**Chemical Analysis: Purity, formulations and chromatography.**	Video - Purity & formulations Video - Purity & formulations	**Motion-graphs, rearranging equations**	Video - Distance-Time Graphs Video - Velocity Time Graphs
	How Materials are Cycled / biodiversity / waste management	Video - How Materials are Cycled Video - Biodiversity Video - Waste Management Exam question	**Chemical Analysis: Required Practical: Chromatography.**	Video - Chromatography Video - Required practical 'Chromatography' Video - Required practical 'Chromatography'	**Newton's Laws**	Video - Newton's First & Second Law Video - Newton's Third Law
28-Mar	**Global warming / maintaining biodiversity**	Video - Global Warming Exam question	**Atmosphere: The composition and evolution of the Earth's atmosphere.**	Video - How Has the Atmosphere Changed Video - Evolution of the Atmosphere Quiz - The Evolution of Earth's Atmosphere	**Momentum**	Video - conservation of momentum part 1 Video - conservation of momentum part 2

	Cell Division — Chromosomes / Mitosis & Cell Cycle	Video - Cell cycles, chromosomes & mitosis Video - Cell division by Mitosis Exam question	**Atmosphere: Climate Change and Pollution**	Video - The Greenhouse Effect Video - Climate Change Quiz - Greenhouse Effect	**EM waves and IR required practical**	Video - Electromagnetic Waves Video - Radio Waves Video - Microwaves and Infrared Video - required practical 'Infra-Red Absorption & Emission'
04-Apr	**Stem Cells**	Video - Stem Cells Exam question	**Using Earth's Resources: Obtaining potable water.**	Video - Potable Water Video - How Does Water Treatment Work Quiz - Potable Water	**Electromagnetism**	Video - Electromagnetism
	Human Digestive System (including enzymes)	Video - Digestive System Video - The Digestive System Video - Digestive Enzymes Video - Digestive Enzymes Video - How Enzymes Work Exam question	**Using Earth's Resources: Metals**	Video - Extraction of Metals & Reduction Quiz - Alternative to metal extraction	**Motors**	Video - Motor Effect Video - How the Electric Motor Works
11-Apr	**EASTER**					
18/04/2022 (Thurs & Fri only)	**Movement of particles/Required practical - osmosis**	Video - Required Practical 'Effects of Osmosis on Plant Tissue" Exam question	**Atomic Structure**	Video - What Is an Atom Video - History of the Atom Video - Atomic Number and Mass Number	**Weight, gravity, terminal velocity**	Video - Gravity, Weight and GPE
	Required practical - Food tests	Video - Required Practical 'Food Tests"		Video - Electron Arrangement Quiz - Atoms and Elements		

		Exam question		Quiz - History of the Atom Quiz - Atomic Structure		
25-Apr	**Heart & blood vessels**	Video - The Heart and Circulation Video - Arteries, Veins and Capillaries Video - The Blood Video - The Heart Video - Blood Vessels Video - What Is Blood Made of? Exam question	**Periodic Table**	Video - Modern Periodic Table Video - Explaining Reactivity Trends Video - Group 1 Alkali Metals Video - Group 7 - The Halogens Video - Group 0 - Noble Gases Quiz - History of the Periodic Table Quiz - Periodic Table and Reactivity Quiz - Alkali Metals Quiz - Group 7 - The Halogens Quiz - Noble Gases	**Energy stores, transfers, and changes,**	Video - Energy Stores, Transferring Energy & Work Done
			Bonding. How bonding and structure are related to properties and substances.	Video - Formation of Ions Video - Ionic bonding Video - Giant Ionic Structures properties Video - Covalent Bonding Video - Properties of Simple Molecular Substances & Giant Covalent Structures Video - Allotropes - Graphene and Fullerenes Video - Metallic Bonding Quiz - Forming Ions Quiz - Ionic Bonding Quiz - Properties of ionic compounds Quiz - Covalent Bonding Quiz - Giant Covalent Structures Quiz - Fullerenes and Graphene Quiz - Metallic Bonding	**Required practical - specific heat capacity, calculations, analyse & power**	Video - Internal Energy and Specific Heat Capacity

02-May	**CHD — Non-Communicable Disease /Health Issues / Effect of Lifestyle on Non-Communicable Disease**	Video - Cardiovascular Diseases Video - non-communicable diseases Video - Lifestyle and Disease Exam question	**Quantitative Analysis. Use of amount of substance in relation to masses of pure substances.**	Video - Using Moles to Balance Equations Video - How to Calculate Concentration Quiz - Relative formula mass practice Quiz - Mole Calculations Quiz - Moles and Mole Conversions Quiz - Concentration	**Required practical - IV components & explanation**	Video - V = IR Equation & Current/Potential Difference Graphs
	Cancer	Video - Cancer Video - Cancer Exam question	**Chemical Changes: Reactivity of Metals**	Video - Reactivity Series of Metals & Displacement Reactions Video - Displacement Reactions & Reactions in Solutions Video - Extraction of metals & reduction Quiz - Reactivity Series Quiz - Displacement Reactions Quiz - Extraction of Metals		Video - Required practical 'Testing Components (I-V Characteristics)'
09-May	**Photosynthesis — Overview**	Video - Photosynthesis Video - Photosynthesis Exam question	**Chemical Changes: Reactions of acids**	Video - Acids Reacting with Metals Video - Neutralisation Video - The pH Scale & Strong vs Weak Acids Quiz - Metals and acids Quiz - Acids and Bases(alkali) Quiz - Strong and Weak Acids	**Radioactivity- atom**	Video - Atomic Structure, Isotopes & Electrons Shells Video - Alpha, Beta and Gamma Radiation
	Rate of Photosynthesis / Required Practical 5	Video - Factors Affecting the Rate of Photosynthesis Video - Required Practical 6: Photosynthesis" Exam question	**Chemical Changes: Required Practical: Preparing a salt**	Video - Three Reactions of Acids Video - Required practical 'Making Salts' Quiz - Acids & bases Quiz - Making Copper Sulphate prac	**Radioactivity- decay equations, half-life etc**	Video - Radioactive Decay and Half Life
16-May	**EXAM START**					

	Biology Paper 1 - 17th May AM	**Electrolysis/required practical 'electrolysis of aqueous solutions'**	Video - Required practical 'Electrolysis'	**Continue with Paper 1 revision**
	Go back to Paper 2 revision		Quiz - Electrolysis of Copper Sulphate	
		Energy Changes/required practical 'temperature changes'	Video - Exothermic and Endothermic Reactions	
			Video - Bond Energies	
			Video - Required practical 'Temperature Changes'	
			Quiz - Energy Changes	
23-May	**Paper 2 revision**	**Chemistry Paper 1 - 27th May AM**		
30-May	**HALF TERM**			
06-Jun	**Paper 2 revision**	**Go back to paper 2 revision**		**Physics paper 1 - 9th June PM**
		Rates of Reaction/required practical	Video - Rates of Reaction	**Go back to paper 2 revision**
			Video - Factors Affecting the Rate of Reaction	
			Video - Required practical 'disappearing cross'	
			Video - required practical 'collecting Gas'	
			Video - Required Practical 'Rates of Reaction"	
			Quiz - Rate of Reaction	
			Quiz - required practical	
		Reversible reactions & dynamic equilibrium	Video - Reversible Reactions and Equilibrium	
			Quiz - Dynamic equilibrium	
13-Jun	**Biology Paper 2 - 15th June AM**		Video - Hydrocarbons & Alkanes	**Paper 2 revision**

		Crude oil; distillation & cracking	Video - Crude Oil and Fractional Distillation	
			Quiz - Hydrocarbons	
			Video - Alkanes: properties & combustion	
			Video - Combustion and Fractional Distillation	
			Video - Cracking Crude Oil & Alkenes	
			Quiz - Uses of Crude Oil	
			Quiz - Cracking Crude Oil	
20-Jun		**Chemistry Paper 2 - 20th June AM**		**Physics Paper 2 - 23rd June AM**