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| **Year** | **Subject** | **Area of study: HT 1** | **Area of study: HT 2** | **Area of study: HT 3** | **Area of study: HT 4** | **Area of study: HT 5** | **Area of study: HT 6** |
| **12** | Bio | T1: 3.2.1 Cell structure - 3.2.3 Transport across cell membranes (start)T2: 3.1.1 Monomers and polymers - 3.1.4 Proteins | T1: 3.2.3 (Finish) Transport across cell membranes - 3.2.4 Cell recognition and the immune system (start)T2: 3.1.5 Nucleic acids are important information-carrying molecules - 3.1.8 Inorganic ions and 3.3.1 Surface area to volume ratio | T1: (Finish) 3.2.4 Cell recognition and the immune system and 3.3.4.1 Mass transport in animals (start)T2: 3.3.2 Gas exchange - 3.3.3 Digestion and absorption | T1: (Finish) 3.3.4.1 Mass transport in animals - 3.3.4.2 Mass transport in plants and 3.4.1 DNA, genes and chromosomes (start)T2: 3.4.5 Species and taxonomy - 3.4.7 Investigating diversity | T1: (Finish) 3.4.1 DNA, genes and chromosomesT2: Maths skills | T1: 3.5.3 Energy and ecosystems T2: 3.7.4 Populations in ecosystems |
| Chem | 1.1 Atomic structure 1.2 Amount of substance1.3 Bonding 3.1 Introduction to organic chemistry  | 2.1 Periodicity 1.7 Oxidation, reduction and redox equations 2.2 Group 2 – Alkaline earth metals3.2 Alkanes 3.3 Halogenoalkanes  | 2.3 Group 7 - The Halogens 1.4 Energetics 3.4 Alkenes 3.5 Alcohols  | 1.6 Equilibria, Le Chatelier and Kc 1.5 Kinetics 3.6 Organic Analysis  | Review of key ideas from Y12 | 1.9 Kinetics - Rate equations3.7 Nomenclature and isomerism |
| Phys | 3.2.1 Particles3.3 Waves3.3.1 Progressive and stationary waves | 3.2.2 Electromagnetic radiation and quantum phenomena3.3 Waves3.3.2 Refraction, diffraction and interference | 3.5.1 Current electricity3.5.1.1 Basics of electricity3.5.1.2 Current–voltage characteristics3.5.1.3 Resistivity3.4 Mechanics and materials3.4.1 Force, energy and momentum3.4.1.1 Scalars and vectors3.4.1.2 Moments3.4.1.3 Motion along a straight line3.4.1.4 Projectile motion | 3.5.1 Current electricity3.5.1.4 Circuits 3.5.1.5 Potential divider 3.5.1.6 Electromotive force and internal resistance 3.4 Mechanics and materials3.4.1 Force, energy and momentum3.4.1.5 Newton’s laws of motion3.4.1.6 Momentum3.4.1.7 Work, energy and power3.4.1.8 Conservation of energy | 3.4 Mechanics and materials3.4.2 Materials | 3.6.1.2 Simple harmonic motion3.6.1.3 Simple harmonic systems3.6.1.4 Forced vibrations and resonance3.6.2 Thermal physics3.7 Fields and their consequences3.7.1 Fields3.7.2 Gravitational fields |
| **13** | Bio | T1: 3.5.1 PhotosynthesisT2: 3.7.1 Inheritance | T1: 3.5.2 RespirationT2: 3.7.2 Populations | T1: 3.8 The control of gene expressionT2: 3.6.1 Stimuli, both internal and external, are detected and lead to a response | T1: 3.6.4 Homeostasis is the maintenance of a stable internal environmentT2: 3.6.2 Nervous coordination |  |  |
| Chem | 2.5 Transition metals2.6 Reactions of inorganics compounds in (aq) solution2.4 Periodicity3.7 Review nomenclature and isomerism (from Y12 HT6)3.8 Compounds containing the carbonyl group (aldehydes and ketones) | 1.8 Thermodynamics3.9 Compounds containing the carbonyl group 3.10 Aromatic chemistry | 1.10 Equilibrium constant Kp1.11 Electrode potentials and electrochemical cells3.11 Amines3.12 Polymerisation3.13 Amino acids, proteins and DNA | 1.12 Acids, Bases and Buffers1.9 Kinetics (Revision from Y12 HT6)3.14 Organic synthesis3.15 NMR Spectroscopy 3.16 Chromatography |  |  |
| Phys | 3.6.1.2-3 Simple harmonic motion and systems3.6.1.4 Forced vibrations and resonance3.6.2 Thermal physics3.7 Fields and their consequences3.7.1 Fields3.7.2 Gravitational fields | 3.8 Nuclear physics3.7 Fields and their consequences3.7.3 Electric fields3.7.4 Capacitance | 3.9.2 Classification of stars 3.7 Fields and their consequences3.7.5 Magnetic fields | 3.9.3 Cosmology 3.9.1 Telescopes  |  |  |