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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 chromosomes  T2: 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 substance  1.3 Bonding  3.1 Introduction to organic chemistry | 2.1 Periodicity  1.7 Oxidation, reduction and redox equations  2.2 Group 2 – Alkaline earth metals  3.2 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 equations  3.7 Nomenclature and isomerism |
| Phys | 3.2.1 Particles  3.3 Waves  3.3.1 Progressive and stationary waves | 3.2.2 Electromagnetic radiation and quantum phenomena  3.3 Waves  3.3.2 Refraction, diffraction and interference | 3.5.1 Current electricity  3.5.1.1 Basics of electricity  3.5.1.2 Current–voltage characteristics  3.5.1.3 Resistivity  3.4 Mechanics and materials  3.4.1 Force, energy and momentum  3.4.1.1 Scalars and vectors  3.4.1.2 Moments  3.4.1.3 Motion along a straight line  3.4.1.4 Projectile motion | 3.5.1 Current electricity  3.5.1.4 Circuits  3.5.1.5 Potential divider  3.5.1.6 Electromotive force and internal resistance  3.4 Mechanics and materials  3.4.1 Force, energy and momentum  3.4.1.5 Newton’s laws of motion  3.4.1.6 Momentum  3.4.1.7 Work, energy and power  3.4.1.8 Conservation of energy | 3.4 Mechanics and materials  3.4.2 Materials | 3.6.1.2 Simple harmonic motion  3.6.1.3 Simple harmonic systems  3.6.1.4 Forced vibrations and resonance  3.6.2 Thermal physics  3.7 Fields and their consequences  3.7.1 Fields  3.7.2 Gravitational fields |
| **13** | Bio | T1: 3.5.1 Photosynthesis  T2: 3.7.1 Inheritance | T1: 3.5.2 Respiration  T2: 3.7.2 Populations | T1: 3.8 The control of gene expression  T2: 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 environment  T2: 3.6.2 Nervous coordination |  |  |
| Chem | 2.5 Transition metals  2.6 Reactions of inorganics compounds in (aq) solution  2.4 Periodicity  3.7 Review nomenclature and isomerism (from Y12 HT6)  3.8 Compounds containing the carbonyl group (aldehydes and ketones) | 1.8 Thermodynamics  3.9 Compounds containing the carbonyl group  3.10 Aromatic chemistry | 1.10 Equilibrium constant Kp  1.11 Electrode potentials and electrochemical cells  3.11 Amines  3.12 Polymerisation  3.13 Amino acids, proteins and DNA | 1.12 Acids, Bases and Buffers  1.9 Kinetics (Revision from Y12 HT6)  3.14 Organic synthesis  3.15 NMR Spectroscopy  3.16 Chromatography |  |  |
| Phys | 3.6.1.2-3 Simple harmonic motion and systems  3.6.1.4 Forced vibrations and resonance  3.6.2 Thermal physics  3.7 Fields and their consequences  3.7.1 Fields  3.7.2 Gravitational fields | 3.8 Nuclear physics  3.7 Fields and their consequences  3.7.3 Electric fields  3.7.4 Capacitance | 3.9.2 Classification of stars  3.7 Fields and their consequences  3.7.5 Magnetic fields | 3.9.3 Cosmology  3.9.1 Telescopes |  |  |