

Overview of the year: In Year 10 you will be building on key scientific ideas which you have been introduced to at KS3. The Edexcel Combined Science course has six exams – two for each of Biology, Chemistry and Physics. In Year 10, you will learn about all the topics which are assessed in “Paper 1” for each of the Sciences and will begin to learn about “Paper 2” topics. Throughout the course there are 18 Core Practicals – these are experiments which you must carry out before you sit your exam.			Ways to consolidate and extend your learning in Science: Complete your Tassomai daily goal Answer past paper questions from physicsandmathstutor.com Answer questions from your Edexcel Combined Science textbook and your CGP revision guide Visit museums and scientific centres (all with free entry) are; The Science Museum, National History Museum, Wellcome Collection, Faraday Museum, Anaesthesia Heritage Centre, Kirkaldy Testing Museum, and Horniman Museum.	
Half Term	Unit title	Knowledge	Skills	Assessment
1	CC3-CC4 Atomic Structure and Periodic Table CB1 Key Concepts in Biology (part 1) CP1-2 Motion and Forces	Subatomic particles, patterns in the periodic table Cells and using microscopes Changing speed and Newton’s Laws	Using graphs Using microscopes Rearranging equations Calculating averages	End of topic tests Phase tests Core Practicals
2	CC5-7 Ionic Bonding, Covalent Bonding, Types of Substances CB1 Key Concepts in Biology (part 2) CP3 Conservation of Energy	Bonds between atoms/molecules, filling the outer electron shell Enzymes and transporting substances Energy stores, energy resources	Using diagrams to represent atoms Describing trends from graphs Evaluating pros and cons	End of topic tests Phase tests Core Practicals
3	CC9 Calculations Involving Mass CB2-3 Cells and Control, Genetics CP4-5 Waves, Light and the Electromagnetic Spectrum	Empirical formulae, moles Cells and growth, nervous system, DNA Types of waves, light and refraction, dangers and uses of the EM spectrum	Using the periodic table Using standard form Measuring angles	End of topic tests Phase tests Core Practicals
4	CC1-CC2 States of Matter, Methods of Separating and Purifying Substances CB4 Natural Selection and Genetic Modification CP6 Radioactivity	States, Practicals to Separate Substances Variation, natural selection and Darwin’s theory of evolution Atoms and nuclear radiation	Safely conducting experiments Identifying patterns Understanding the Scientific Method and scientific theories	End of topic tests Phase tests Core Practicals
5	CC8 Acids and Alkalis CB5 Health, Disease and Development of Medicines CP7-8 Energy - Forces Doing Work, and Forces and their Effects	pH and indicators, neutralisation Communicable and non-communicable diseases, the immune system Energy transfer calculations, contact and non-contact forces	Carrying out titrations Addressing ethical questions Drawing scale diagrams Writing chemical equations Balancing chemical equations	End of topic tests Phase tests Core Practicals
6	CC10-11 Electrolytic Processes, Metals CB6 Plant Structures and Functions CP9 – Electricity and Circuits	Ionic substances, electrolysis, metals Photosynthesis and growth Making and investigating circuits	Plotting graphs/plotting charts Identifying variables Building electric circuits	End of topic tests Core Practicals End of year exams on all topics (June)