Curriculum Maps – Year 11

Science: Combined Sciences

Overview of the year:	**Ways to consolidate and extend your learning in Science:**
In Year 11, you will learn about the remaining topics from each Science and will revise in preparation for your GCSE exams. The Edexcel Combined Science course has six exams – two for each of Biology, Chemistry and Physics. During this year, you will continue to learn about the topics which are assessed in "Paper 2" for each of the Sciences. Throughout the course there are 18 Core Practicals – these are experiments which you must carry out before you sit your exam.	Complete your Tassomai daily goal Answer past paper questions from physicsandmathstutor.com Answer questions from your Edexcel Combined Science textbook and your CGP revision guides 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	CC13 Groups in the Periodic Table CB9 Ecosystems and Material Cycles CP7-9 Energy, Forces, Electricity and Circuits	Patterns in the periodic table Biodiversity, the Three Cycles of the Ecosystem Transferring Energy, Making and Investigating Circuits	Identifying patterns and trends Using quadrats Analysing cause and effect Building electric circuits Rearranging equations	End of topic tests Phase tests Core Practicals PPEs
2	CC14-16 Rates of Reaction and Heat Energy Changes in Chemical Reactions CB6 Plant Structures and their Functions CP10-11 Magnetism, the Motor Effect, Electromagnetic Induction	Factors Affecting Reaction Rates, Energy Changes in Chemical Reactions Photosynthesis, Transport in Plants Magnets, Magnetic Fields, the National Grid	Safely conducting experiments Interpreting graphs Application of the inverse square law Detecting magnetic fields	End of topic tests Phase tests Core Practicals
3	CC16-17 Fuels and Earth and Atmospheric Science CB7-8 Animal Coordination, Control and Homeostasis, Exchange and Transport in Animals CP12-13 Particle Model, Forces and Matter	Hydrocarbons, Combustion, Climate Change Hormones, Respiration and Circulatory System States of Matter, Changing States, Changing Shapes, Pressure and Density	Drawing structural formulae Comparing correlation and causation Monitoring cycles using graphs Identification of anomalous results Drawing lines of best fit	End of topic tests Phase tests Core Practicals
4-5	GCSE Exam Preparation	Topics for revision will be identified based on pupils' attainment in assessments	Revising effectively Skills from previous units in Y10 and Y11 will be revised and practiced	PPEs GCSE Exams