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| **Year11 Subject: Combined Science** | | | | | | |
| Intent | **Year 11 GCSE Combined Science encourages the development of knowledge and understanding in Science through opportunities for working scientifically. The curriculum is designed to allow students the opportunity to investigate, observe, experiment, and test their ideas while supporting them to build and deepen their understanding in Science. Students will study a combination of Biology, Chemistry and Physics in preparation for their GCSE examination. Students will first cover paper one topics in each subject area to build fundamental concepts and principles necessary to progress to paper two topics. Students will take part in purposeful practical activities designed to deepen and broaden their understanding of the skills required for their GCSE Science. Their knowledge which will also be further strengthened by weekly targeted homework task.**  **All lessons will provide bespoke teaching focussing on individual learner needs. Summer term will be used for revision sessions with topics selected based on whole class needs whilst continuing to provide individualised bespoke teaching. Timed exam and longer mark exam questions such as 6 markers will be provided routinely to help prepare students for mock exams.**  **Catch-up sessions will be provided from September for students who are most behind, supporting their understanding of core concepts/topic knowledge and deepening and developing their core knowledge and skills. From November, individual targeted intervention sessions will be provided to fill further specific needs and gaps and to refine skills required for their Science GCSE.** | | | | | |
| Implementation | **September - December** | | **January - March** | | **April - July** | |
| Biology PAPER 1  Cell Biology; Organisation; Infection and response; and Bioenergetics.  **Chemistry Paper 1**  Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; and Energy changes.  **Physics Paper 1**  Energy and Energy Resources, Particles at Work and Atomic structure | **Assessment Objective**  **Demonstrate knowledge and understanding of: scientific ideas; scientific techniques and procedures**  **Apply knowledge and understanding of: scientific ideas; scientific enquiry, techniques and procedures.**  **Analyse information and ideas to:**  **interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedure** | **Biology Paper 2**  Biological responses  Genetics and reproduction  Ecology  **Chemistry Paper 2**  Rates, equilibrium and organic chemistry   Analysis and the Earth’s resources  **Physics Paper 2**  Forces in Action | Assessment Objective  **Demonstrate knowledge and understanding of: scientific ideas; scientific techniques and procedures**  **Apply knowledge and understanding of: scientific ideas; scientific enquiry, techniques and procedures.**  **Analyse information and ideas to:**  **interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedure** | | Physics Paper 2-continued | | --- | | Physics topics: Forces; Waves; and Magnetism and electromagnetism |   *REVISON*  *REVISION* | **Assessment Objective**  **Demonstrate knowledge and understanding of: scientific ideas; scientific techniques and procedures**  **Apply knowledge and understanding of: scientific ideas; scientific enquiry, techniques and procedures.**  **Analyse information and ideas to:**  **interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedure**  **REVISION** |
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| Impact | ***AP1*** | | ***AP2*** | | ***AP3*** | |
| ***Winter Mock Exams***  ***Biology F/H Paper 1***  ***Chemistry F/H Paper 1***  ***Physics F/H Paper 1*** | | ***Spring 1 Core Mock***  ***Spring1 Diagnostic Assessment*** | ***Spring Mock Exams***  ***External Spring Exams***  ***NEAs***  ***Biology F/H Paper 2***  ***Chemistry F/H Paper 2***  ***Physics F/H Paper 2*** | ***External Summer National Exams***  ***Biology F/H Paper 1 and 2***  ***Chemistry F/H Paper 1 and 2***  ***Physics F/H Paper 1 and 2*** | |