W.S ideas to be embedded:
1 Development of scientific thinking
2 Experimental skills and strategies
3 Analysis and evaluation
4 Scientific vocabulary, quantities, units, symbols and nomenclature

Sandbach School Science Curriculum:

Year 11 Science Curriculum Sequence

Intent:To consolidate knowledge from Y10 : Students will continue to visit these 10 key topics of forces, electromagnetism, energy, waves, matter, reactions, earth, organisms in whilst applying their understanding in a GCSE context. In addition students will further develop their knowledge of the scientific method within the context of AQA GCSE required practical's.

HT1	HT2	Term 2	Term 3
Combined B16-18 Ecology, B13 Reproduction **Triple (recap)** Eg Cells, Ecology, Decomposition, Food production, GM	**Combined** B13 Reproduction, B14 Variation & evolution. Then preparation for paper 1 mock exam. **Triple (Recap)** Eg: Aseptic techniques, Cell cycle / mitosis, Enzymes, digestive system	**Combined** B15 Genetics & evolution **Triple (Recap)** Eg Immunity, disease, nerves, eye, thermoregulation, glucose, diabetes, kidney, reproductive hormones, plant hormones, meiosis, genetic disorders, Darwin / Lamarck	**Combined** Revision & GCSE Exams 1:15 mins **Triple** Final revision then Exam 2 x 1.45 minutes
Combined C4 Chemical Calculations. **Triple** C4 Chemical Calculations	**Combined** C6 Electrolysis then preparation for paper 1 mock exam. **Triple** C6 Electrolysis then preparation for paper 1 mock exam	**Combined** Complete C6 electrolysis. Then preparation for REV3 (revision of paper 2 topics) **Triple** Complete C6 electrolysis. Then preparation for REV3	**Combined** Revision & GCSE Exams 2 x 1:15 mins **Triple** Final revision then Exam 2 x 1.45 minutes
Combined P13 EM Waves **Triple** P7 Fission and fusion , P10 Surfaces and pressure, P14 Light	**Combined** P15 Electromagnetism then preparation for paper 1 mock exam. **Triple** P14 Light, P15 EM devices and transformers , P16 Space	**Combined** Recap of paper 2 topics **Triple** P12 Ultrasound and seismic waves , P10 Changes in momentum	**Combined** Revision & GCSE Exams 2 x 1:15 mins **Triple** Final revision then Exam 2 x 1.45 minutes
Why start here? These are the final units of the course. * More challenging topics are delivered here, these have been left until Y11 due to the high level of mathematical skills required.	**Why move onto these units?** The last part of the HT will be preparation for paper 1 from mock exams.	**Why move onto these units?** **These are the final units of the specification.**	**Why move onto these units?** N/a No new content to be covered during term 3 of Y11. Revision will be based on ERA from previous years & analysis of weaker areas of mock exams.
Spec links: 4.7.1 Adaptations, interdependence and competition, 4.7.2 Organisation of an ecosystem, 4.7.3 Biodiversity and the effect of human interaction on ecosystems., 4.6.1 Reproduction 5.3.1 Chemical measurements, conservation of mass and the quantitative interpretation of chemical equations (foundation level only) 6.6.2 Electromagnetic waves, 6.6.2.1 Types of electromagnetic waves **4.4.4.1 Nuclear fusion , 4.4.4.2 Nuclear fission, 4.5.5.1 Pressure in fluids, 4.6.2.6 Visible light**	**Spec links:** 4.6.1 Reproduction, 4.6.2 Variation and evolution. 5.4.3 Electrolysis 6.7 Magnetism and electromagnetism, 6.7.1 Permanent and induced magnetism, magnetic forces and fields **4.6.2.5 Lenses , 4.7.3 Induced potential, transformers and national grid, 4.8 Space Physics ,**	**Spec links:** 4.6.3 The development of understanding of genetics and evolution 5.7.1 Carbon compounds as fuels and feedstock 5.10.1 Using the Earth's resources and obtaining potable water, 5.10.2 Life cycle assessment and recycling **4.6.1.4 Sound waves , 4.6.1.5 Waves for detection and exploration , 4.5.7.3 Changes in momentum**	**Spec links::** **N/a**
Teaching these topics here supports: A level topics	**Teaching these topics here supports:** A level topics	**Teaching these topics here supports:** A level topics	**Teaching these topics here supports:**
These topics feed from: 7D Ecosystems Y10 Work on Ecology unit	**These topics feed from:** 7B Reproduction 8B plant reproduction C3 Structure & bonding. P12 Wave properties.	**These topics feed from:** 9A Genetics & evolution 8E Combustion, C3 Structure & bonding.	**These topics feed from:**