Combined Science Curriculum Grid

Examination Board: Edexcel
Further information:
https://qualifications.pearson.com/content/dam/pdf/GCSE/Science/2016/Specification/GCSE_CombinedScience_Spec.pdf
Additional Support: https://www.senecalearning.com/
https://www.bbc.com/bitesize/examspecs/zqkww6f

Combined Science GCSE

Biology	Chemistry	Physics
Topic 1 – Key concepts in Biology **Topic 2 –** Cells and control **Topic 3 –** Genetics **Topic 4 –** Natural selection and genetic modification **Topic 5 –** Health, disease and the development of medicines **Topic 6 –** Plant structures and their functions **Topic 7 –** Animal coordination, control and homeostasis **Topic 8 –** Exchange and transport in animals **Topic 9 –** Ecosystems and material cycles	**Topic 1 –** Key concepts in chemistry **Topic 2 –** States of matter and mixtures **Topic 3 –** Chemical changes **Topic 4 –** Extracting metals and equilibria **Topic 6 –** Groups in the periodic table **Topic 7 –** Rates of reaction and energy changes **Topic 8 –** Fuels and Earth science	**Topic 1** – Forces and motion **Topic 2** – Conservation of energy **Topic 3** – Waves and the electromagnetic spectrum **Topic 4** – Radioactivity **Topic 6** – Electricity and circuits **Topic 8** – Magnetism and electromagnetic induction **Topic 9** - Matter

Written Assessment

Students will sit 6 externally examined papers at the end of Year 11.
All papers are out of 60 marks and are 1 hour and 10 minutes in length.
Each paper contributes 16.67% of the Combined Science GCSE
Paper 1: Biology 1 – Topics 1, 2, 3, 4 and 5
Paper 2: Biology 2 – Topics 1, 6, 7, 8 and 9
Paper 3: Chemistry 1 – Topics 1, 2, 3 and 4
Paper 4: Chemistry 2 – Topics 1, 6, 7 and 8
Paper 5: Physics 1 – Topics 1, 2, 3 and 4
Paper 6: Physics 2 – Topics 1, 2, 6, 8 and 9
Each paper consists of a mixture of different question styles, including multiple-choice questions, short answer questions, calculations and extended open-response questions.

Year 10

Autumn Term

<u>Biology Units</u>
CB1 – Overarching concepts in Biology

CB2 – Cells and control

Chemistry Units

CC1 - States of Matter
CC2 – Separating mixtures of Substances
CC3 – Atomic Structure
CC4 – The Periodic Table
CC5 – Ionic Bonding

Physics Units

CP1 – Forces and motion
CP2 – Conservation of energy

Spring Term

Biology Units

CB3 - Genetics
CB4 – Natural selection and genetic modification

Chemistry Units

CC6 – Covalent Bonding
CC7 – Types of Substance
CC8 - Acids

Physics Units

CP3 – Waves and the electromagnetic spectrum

Summer Term

Biology Units

CB5 - Health, disease and the development of medicines

Chemistry Units

CC9 - Calculations involving masses

Physics Units

CP4 – Radioactivity

Year 11

Autumn Term

Biology Units

CB6 - Plant structures and their functions
CB7 - Animal coordination, control and homeostasis

Chemistry Units

CC10 - Electrolytic processes
CC11 - Obtaining and using metals
CC12 - Reversible reactions and equilibria
CC13 - Groups in the periodic table

Physics Units

CP6 – Electricity and circuits
CP8 – Magnetism and electromagnetic induction

Spring Term

Biology Units

CB8 - Exchange and transport in animals
CB9 -Ecosystems and material cycles

Chemistry Units

CC14 - Rates of reaction
CC15 - Heat changes in chemical reactions

CC16 – Fuels

Physics Units

CP9 - Matter

Summer Term

Biology Units

CB9 -Ecosystems and material cycles (cont.)

Revision

Chemistry Units

CC17 – Earth and atmospheric science

Revision

Physics Units

Revision