



## Key Stage 4 Science Curriculum Overview

- The core KS4 Science Curriculum is taught through ‘Combined Science: Support Edition’ [Pearson publications]. The programme incorporates textbook activities, digital resources, research activities and experimental practice to meet the requirements to prepare pupils for pathways to qualifications.
- The Entry Level qualification enables all students to have the opportunity to experience all three areas of the Science Curriculum. Once completed to a minimum of a Level 1 award, the students’ individual Science pathway will be planned (in collaboration with the student, the Science teacher and SLT) according to their abilities, interests and personal goals (and with consideration to the amount of time study time they have available).

Combined Science (offered to all students)						
Year/ Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Yr. 1 Entry Level Certificate</b>	Biology 1A: Cells, genetics, inheritance and modification	Physics 1A: Forces, movement and energy	Chemistry 1A: Atoms, compounds and states of matter	Biology 1B: Health, disease and the development of medicines	Physics 1B: Waves and radiation	Chemistry 1B: Separating mixtures

If students decide to follow the Entry Level route after completing the Core Units, they can then complete the Entry Level Certificate in Further Science.

Combined Science						
Year/ Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Yr. 2 Entry Level Certificate in Further Science</b>	Biology 2A: Plants and ecosystems	Chemistry 2A: Acids and metals	Physics 2A: Electricity and magnets	Biology 2B: Human Biology	Chemistry 2B: Elements and chemical reactions	Physics 2B: Energy and particles

Alternatively, after completing the Combined Science Core units and Entry level course, students (in collaboration with parents, the Science teacher and SLT) will have the opportunity to achieve further qualifications by completing one of the following focussed Science subject courses:

(Pearson Edexcel) GCSE Physics						
Year/Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Yr. 2 AQA Physics</b>	Energy Electricity	Particle model of matter Atomic structure	Forces Waves	Magnetism and electromagnetism Space physics	Revision	Revision

(Pearson Edexcel) GCSE Biology						
Year/Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Yr. 2 AQA Biology</b>	Cell biology	Organisation Infection and Response	Bioenergetics	Homeostasis and Response Inheritance, variation and evolution	Revision	Revision

(Pearson Edexcel) GCSE Chemistry						
Year/Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Yr. 2 AQA Chemistry</b>	Atomic Structure and the Periodic Table  Bonding, structure and the properties of matter	Quantitative Chemistry  Chemical changes	Energy Changes  Organic Chemistry	Chemical Analysis  Using resources	Revision	Revision

GCSE Astronomy						
Year/Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
GCSE Yr. 1	Topic 1: Planet Earth  Topic 6: Celestial observation	Topic 2: The lunar disc  Topic 9: Exploring the Moon	Topic 11: Exploring the Solar System	Topic 5: Solar System observation  Topic 7: Early models of the Solar System	Topic 8: Planetary motion and gravity  Topic 10: Solar astronomy	Topic 3: The Earth-Moon-Sun system  Topic 4: Time and the Earth-Moon-Sun cycles
GCSE Yr. 2	Topic 12: Formation of planetary systems  Topic 13: Exploring starlight	Topic 14: Stellar evolution  Topic 15: Our place in the Galaxy	Topic 16: Cosmology  Revision	Revision	Revision	Revision

BTEC Level 1 Introductory Certificate in Land-based Studies						
Year/Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Yr. 1	Core Unit - Being Organised	Core Unit - Being Organised	Core Unit - Developing a Personal Progression Plan	Core Unit - Developing a Personal Progression Plan	Choice Unit 1	Choice Unit 1
Yr. 2	Choice Unit 2	Choice Unit 2	Choice Unit 3	Choice Unit 3		