

Combined Science – Biology – Year 11

Inheritance

- Variation and Evolution
- Fossils and Extinction
- Selective Breeding
- Genetic Engineering

Unit length:
4 – 5 weeks

Ecology

- Classification
- Biotic & abiotic factors
- Competition in ecosystems
- Adaptations of animals & plants
- Food chains and webs
- Feeding relationships

Unit length:
8 – 9 weeks

Environment

- Sampling organisms
- RP7: Sampling populations
- Carbon and Water cycles
- Waste management and land use
- Deforestation and global warming
- Biodiversity

Unit length:
6- 7 weeks

Countdown Programme - Revision

Key content and working scientific skills from each topic within Paper 1 and then Paper 2 are revisited. Exam technique is taught throughout the programme. Usually a topic is covered per lesson, and this is the final opportunity students will have to work through the content with their teacher.

Unit length:
12 – 13 weeks

Combined Science – Chemistry – Year 11

Organics

- Hydrocarbons and crude oil
- Alkanes Fractional distillation
- Cracking Alkenes

Unit length:

5 – 6 weeks

Analytical

- Purity & formulations
- Chromatography and Rf values
- RP12: Chromatography
- Tests for gases

Unit length:

4 – 5 weeks

Earth Chemistry

- Earth's atmosphere
- Greenhouse gases and pollution
- Climate change
- Earth's resources
- Potable water
- RP13: Water purification
- Life cycle assessments

Unit length:

7 - 8 weeks

Countdown Programme – Revision

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Combined Science – Physics – Year 11

Forces and Magnetism

- Weight
- Terminal velocity Momentum
- RP5: Forces, mass & acceleration
- Forces and elasticity
- RP6: Investigating elasticity
- Magnetic fields
- Electromagnets
- The Motor Effect

Unit length:
9 – 10 weeks

Waves

- Waves and wave properties
- Reflection
- Refraction
- RP7: Investigating waves
- Electromagnetic Spectrum
- Properties & uses of EM waves
- RP8: Infra-red radiation

Unit length:
7 – 8 weeks

Countdown Programme - Revision

Key content and working scientific skills from each topic within Paper 1 and then Paper 2 are revisited. Exam technique is taught throughout the programme. Usually a topic is covered per lesson, and this is the final opportunity students will have to work through the content with their teacher.

Unit length:
15 - 16 weeks