

Science Curriculum Journey: Trilogy (Year 11)

Curriculum Map 2026 - 2027



Exam Preparation

- Revision masterclasses
- Required practical's (practice and theory)
- Command words
- Application questions

Using resources

Sustainable development Identifying and managing finite resources
Potable water
Treatment of rain water, sea water and waste water

Magnets and magnetic fields

Current, magnetism and forces
Magnetism and electromagnetism
Motor effect.

Waves

Compare transverse and longitudinal waves
Reflection of waves
Sound waves and the ear

Homeostasis

- The nervous system
- Investigating reaction times
- The endocrine system
- Control of blood glucose
- The menstrual cycle
- Contraception
- Hormones to treat infertility
- Negative feedback

The Atmosphere

- Theories of the early atmosphere
- Explaining changes in the atmosphere over time
- The greenhouse effect and global warming
- Other pollutants from fuels

Inheritance

- Sexual and asexual reproduction
- Meiosis and fertilisation
- DNA
- Describe cystic fibrosis and polydactyl
- Family trees
- Inheritance of sex
- Variation and evolution
- Evolution by natural selection
- Evidence for evolution (fossils and resistant bacteria)
- Selective breeding
- Genetic engineering
- classification

Forces

- Scalar and vector quantities
- Contact and no contact forces
- Resultant forces
- Work done
- Elasticity
- Investigating the stretching of a spring
- Speed & velocity
- Interprets velocity time graphs
- Calculate acceleration
- Newtons 1st, 2nd and 3rd laws
- Stopping distances
- Momentum

Rates of reaction

- affect rates of reaction
- Determine rates of reaction from investigation and data
- Explain rates of reaction using particle model

Ecology

- Communities
- Interdependence
- Discuss biotic and abiotic factors
- Adaptations including extremophiles

December MOCKS

Paper 1 Biology & Chemistry & Physics