Combined Science Learning Journey Year 11

Understanding and Applying Scientific Skills

- Understanding variables
- Drawing graphs and analysing graphical data
- Writing methods
- Analysis of secondary data
- Assessing impact of scientific concepts
- Modelling scientific concepts
- Understanding relationships between science and society
- Drawing conclusions
- Identify, describe, explain, apply, link
- Applying maths to the scientific concepts
- Risk Assessments
- Describe patterns

Genetics and Evolution

Teacher 2 / Teacher 1

- Evidence for evolution
- Fossils and extinction
- Antibiotic resistant bacteria
- VS
- Classification

Revision

GCSEs

Magnets and Magnetic Fields

Teacher 2 / Teacher 1

- Electromagnetism Motor effect
- Magnetic fields
- Magnetic forces
- Attraction and repulsion

Variation and Evolution

Teacher 2 / Teacher 1

- Genetic engineering
- Selective breeding
- Evolution by natural selection
- Variation

Electromagnetic Spectrum

Teacher 2 / Teacher 1

- Electromagnetic waves
- Light, infrared, microwaves, radio waves
- Communications
- UV rays, X-rays, gamma rays

Using Resources

Teacher 2 / Teacher 1

- Metal extraction
- Using Earth's resources
- Life cycle assessment and recycling
- Potable water
- Reducing use of resources

Chemistry of the Atmosphere

Teacher 2 / Teacher 1

- Climate Change
- CO_2
- Carbon dioxide methane and greenhouse gases
- Pollutants
- Composition of the atmosphere
- Early Atmosphere

Chemical analysis

Teacher 2 / Teacher 1

- Tests for common gases
- Chromatography
- Pure substances and mixtures

Organisation of an Ecosystem

Teacher 2 / Teacher 1

- Feeding relationships
- Material recycling
- Human populations

Biodiversity

Teacher 2 / Teacher 1

- Water land and air pollution
- Deforestation and global warming

Reproduction

Teacher 2 / Teacher 1

- Sexual and asexual reproduction
- DNA and the genome
- Sex inheritance
- Genetic inheritance
- Inherited disorders
- Screening for genetic disorders

Waves

Teacher 2 / Teacher 1

- Reflection & refraction
- Wave calculations
- Properties of waves
- Nature of waves

Adaptations, Interdependence & Competition

Teacher 2 / Teacher 1

- Competition
- Distribution of organisms
- Abiotic and biotic factors
- Communities

YEAR 11

Teacher 1

Teacher 2