KS4 COMBINED SCIENCE LEARNING JOURNEY

The St Lawrence Academy
Treasuring Everyone
Transforming Community

AQA

Bespoke Revision

The Earth's resources
- Finite/renewable resources
- Potable water
- Desalination

The Earth's Atmosphere
- Greenhouse gases
- Climate change
- Pollutants

Electromagnetism
- Magnetic fields
- Electromagnets

Genetics & evolution
- Fossils & extinction
- Antibiotic resistance
- Classification

Variation & Evolution
- Natural selection
- Selective breeding
- Genetic engineering

Genetic reproduction
- Cell division
- Inherited disorders
- DNA & the genome

Hormonal coordination
- Hormones
- Diabetes
- Reproduction

Electromagnetic waves
- Spectrum
- Communication
- Uses & dangers

Rates of reaction
- Catalysts
- Reversible
- Equilibrium

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Ecosystems
- Adaptations
- Ecosystems
- Biodiversity

Wave properties
- Longitudinal
- Transverse
- Sound waves

Human nervous system
- Homeostasis
- Reaction time
- Reflexes

Force & motion
- F=ma
- Terminal velocity
- Force and Braking

Motion
- Speed time graphs
- Acceleration
- Velocity

Forces in balance
- Vector/ scalars
- Centre of mass
- Resultant forces

Radioactivity
- Discovery of the nucleus
- Alpha, Beta, Gamma
- Half life

Respiration
- Aerobic/anaerobic
- Response to exercise
- Metabolism

Photosynthesis
- Rates
- How plants use glucose

Chemical analysis
- Pure substances
- Chromatography
- Testing for gases

Non-communicable Disease
- Cancer
- Smoking
- Diet & alcohol

Preventing & Treating Disease
- Vaccinations
- Antibiotics
- Drugs

Communicable disease
- Viral
- Bacterial
- Protist & fungi

Chemical Calculations
- RAM
- The Mole
- Expressing concentrations

Crude oil & fuels
- Hydrocarbons
- Fractional distillation
- Cracking

Energy changes
- Exo/endo reactions
- Energy transfers
- Reaction profiles

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