KS4 COMBINED SCIENCE The St Lawrence Academy LEARNING JOURNEY



Bespoke Revision

Finite/renewable resources Potable water **Desalination**

The Earth's resources

The Earth's Atmosphere

Climate change **Pollutants**

Electromagnetism

Magnetic fields Electromagnets



Genetic reproduction

Cell division DNA & the genome

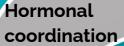
Uses & dangers

Natural selection Selective breeding Genetic engineering

Variation & Evolution

Genetics & evolution

Fossils & extinction
Antibiotic resistance Classification



Electromagnetic

Hormones Reproduction



Catalysts Reversible Equilibrium

Rates of reaction



Ecosystems

Adaptations Ecosystems Biodiversity



Speed time graphs Acceleration Velocity

Terminal velocity

Force and Braking Force & motion

Human nervous system

Homeostasis **Reaction time** Reflexes



Wave properties

Longitudi<u>na</u>l Transverse Sound waves



Motion

Forces in balance

> Vector/ scalars **Centre of mass Resultant forces**

Discovery of the nucleus Alpha, Beta, Gamma Half life

Radioactivity



Aerobic/anaerobic Response to exercise <u>Metabolism</u>

Photosynthesis

How plants use glucose

Chemical

analysıs





Preventing & Treating Disease Smoking

Vaccinations Antibiotics

Diet & alcohol

Pure substances Chromatography Testing for gases

Non-communicable Disease Communicable Drugs

disease Viral

Bacterial Protist & fungi



Crude oil & fuels

Hydrocarbons Fractional distillation Cracking

RAM The Mole **Expressing concentrations**

Chemical Calculations

Energy changes

Exo/endo reactions Energy transfers Reaction profiles





