Science Faculty: Chemistry Learning Journey

YEAR 13

- Go to university to enhance your studies and get a degree
- Start a degree level apprenticeship
- Take a gap year, travel the w orld and embrace new cultures
- Consider summer internship and voluntary w ork to enhance your learning
- Further Synthesis and Analysis
- Polymers, Amino acids, Proteins and DNA
- Isomers, Carbonyl Compounds, Aromatics and Amines
- Period 3 Elements and Transition Metals
- Acids, Bases and pH
- Electrode Potentials and Cells
- Rate Equation and Kp
- Thermodynamics

YEAR 12

- GCSE examination preparation
- Revision and linking concepts
- Required practicals and data analysis
- Chemical analysis and identification
- Potable water and wastewater treatment
- Life cycle assessments and recycling
- Using Earth's resources
- Cracking and organic reactions
- Fractional distillation and combustion
- Crude oil and hydrocarbons
- Atomic Structure
- Amount of Substance
- Bonding
- Energetics
- Kinetics
- Equilibria and Redox Reactions
- Periodicity
- Group 2 and 7 Elements
- Introduction into Organic Chemistry
- Alkanes and Halogenoalkanes
- Alkenes and Alcohols
- Organic Analysis

YEAR 11

- Structure and properties of materials
- Ionic, covalent and metallic bonding
- Reaction profiles
- Exothermic and endothermic reactions
- Metal reactivity and extraction
- Chemical tests
- Electrolysis
- Purity and chromatography
- Quantitative chemistry
- Mixtures and separation
- Electronic structure and the periodic table
- Investigating reaction rates
- Atomic structure and isotopes
- The atmosphere and climate change
- Chemical formulae and balancing equations

YEAR 10

- Atomic structure and bonding review
- Acids, neutralisation and making salts
- Energy changes and bond energies
- Rates of reaction and collision theory
- Reversible reactions and equilibrium

YEAR 9

- Metals and non-metals
- Metal reactions and reactivity
- Extracting metals
- Alloys and corrosion
- The atmosphere and carbon cycle
- Climate change and pollution
- Materials, plastics and recycling
- Crude oil and fractional distillation
- Atoms, elements and the periodic table

YEAR 8

- Fireworks and thermal decomposition
- Chemical equations
- Chemical and physical changes
- The rock cycle and porosity
- Rock types and formation
- Neutralisation
- The pH scale and indicators
- Acids and alkalis
- Particles: solids, liquids and gases
- Energy changes and combustion

YEAR 7

THE FISHER WAY

The Fisher Way aims to educate and inspire with joy, faith and love because we are an inclusive Catholic community.

Successful and Resilient Learners, Confident Individuals and Responsible Citizens