

KS5 Chemistry Learning Journey OCR B A-LEVEL CHEMISTRY

The science curriculum at St Mark's is designed to engage and enthuse students' curiosity about the world around them, enabling them to develop a lifelong enjoyment

**Year
12**

Elements of Life

Atomic structure, spectra and electronic structure, mass spectroscopy, group 2, shapes of molecules and quantitative chemistry

Developing Fuels

Thermochemistry, organic chemistry, catalysts, gas volumes

Careers

What's in a Medicine

Alcohols, Phenols, carboxylic acids, esters, mass and infrared spectroscopy, organic synthesis and green chemistry

Ozone Story

Ozone layer, rates and radical reactions, intermolecular bonds, haloalkanes, and electromagnetic spectrum

Elements from the Sea

Halogen and redox chemistry, electrolysis, equilibrium and atom economy

**Year
13**

Polymers and Life

Further Organic Chemistry, condensation polymers, amines, amides, amines and protein chemistry, DNA, RNA

Colour by Design

Dyes and colour, Organic synthesis and aromatic compounds

Chemical Industry

Nitrogen, kinetics, equilibrium, costs, risks and benefits of industrial processes

**Exam
Ready!**

Oceans

Dissolving and enthalpy changes, acid-base equilibria and the greenhouse effect

Developing Metals

Redox reactions, Electrochemical cells, transition metals, colorimetry

