

# Separate Science (Year 10)

Curriculum Map 2025-2026



## Chemistry

### Organic Chemistry

- Describe how crude oil was formed
- Describe the structure of alkanes
- Explain the properties fractions of crude oil
- Describe fractional distillation and cracking
- Combustion

Mocks  
Paper 1  
Biology,  
Chemistry &  
Physics

### Exam Preparation

- Required practical's
- Command words
- Application questions

### Quantitative Chemistry

- Writing and balancing equations
- Conservation of mass
- Relative formula mass
- Moles in g
- Moles in solution
- Percentage yield Atom economy

### Chemical changes

- The reactivity series of metals
- Extraction of metals
- Reduction with carbon Electrolysis
- Reactions of metal compounds to make salts

### Energy Changes

- Endothermic reactions
- Exothermic reactions
- Reaction profiles
- Bond energy calculations

January  
Assessment

### Structure and Bonding

- Formation of bonds: Ionic
- Covalent
- Metallic
- Properties of Ionic, covalent and metallic bonds
- Alloys and polymers

### Periodic table

- Development of the periodic table (Mendeleev)
- Metals/ non metals
- Reactions of group 1
- Reactions of group 7
- The nobles gases The transition metals

### The atom

- Size and mass of the atom and subatomic particles
- How the atomic model has developed
- Isotopes & calculating  $A_r$