

## Curriculum Journey Year 10

### Term 1

#### Yellow highlights – Triple Science ONLY.

| WB             | Content  |
|----------------|--|
| 26th August    | <b>RECAP: C6 – Electrolysis</b><br>Introduction to electrolysis<br>Changes at the electrodes<br>Molten and Brine |
| 2nd September  | Extraction of aluminium<br>Practice Questions  |
| 9th September  | <b>C7 – Energy Changes</b><br>Exothermic and Endothermic<br>Energy transfer<br>Reaction Profiles                 |
| 16th September | Bond Energy Calculations<br><b>Chemical cells and Battery</b>  |
| 23rd September | <b>Fuel Cells</b>  |
| 30th September | <b>C8 – Rates and Equilibrium</b><br>Rates of reaction<br>Collision theory                                       |
| 7th October    | Factors affecting rates of reaction<br>Practical   |
| 14th October   |  |
| 21st October   | Rates practical – concentration/ pressure<br>Effect of catalyst  |
| 28th October   | Reversible reactions<br>Dynamic equilibrium  |
| 4th November   | Equilibrium and altering conditions  |
| 11th November  | <b>C9- Organic Chemistry</b><br>Fractional Distillation<br>Burning hydrocarbons                                  |
| 18th November  | <b>C10 -Organic Reactions</b><br>Cracking hydrocarbons<br>Reactions of Alkenes                                   |

|               |  |
|---------------|--|
| 25th November | Structures of alcohols<br>Reactions and uses of alcohols           |
| 2nd December  | Carboxylic acids and esters<br>Polymers<br>Addition Polymerisation |
| 9th December  | Natural polymers<br>DNA  |

## Term 2

| WB            | Content   |
|---------------|---|
| 6th January   | <b>C12- Chemical Analysis</b><br>Pure substances and mixtures<br>Analysing chromatograms<br>Tests for gases       |
| 13th January  | Practical -Test for positive ions<br>Test for negative ions<br>Instrumental analysis                              |
| 20th January  | <b>C13 – The Earths Atmosphere</b><br>History of the Earths Atmosphere<br>Evolving Atmosphere<br>Greenhouse Gases |
| 27th January  | Global Climate change<br>Atmospheric pollutants   |
| 3rd February  | <b>C14 – Earths Resources</b><br>Finite and renewable resources<br>Water safe to drink<br>Treating water          |
| 10th February | Extracting metals from ores – independent task  |
| 17th February | Life cycle assessment<br>Reduce, reuse and recycle  |
| 24th February | <b>C15 – using our Resources</b><br>Rusting<br>Using Alloys<br>Properties of polymers                             |

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|----------------|--|
| 3rd March (R)  | Glass and Ceramics<br>Haber Process                                |
| 10th March (R) | Haber Process – economic process<br>Making fertilisers in industry |
| 17th March (R) | Review   |

### Term 3

| WB         | Content                                      |
|------------|--|
| 7th April  | Revision Masterclass Chemical Calculations   |
| 14th April | Revision Masterclass - Structure and Bonding |
| 21st April | Revision Masterclass – Electrolysis          |
| 28th April | Revision Masterclass – Chemical Changes      |
| 5th May    | Revision Masterclass – Energy Changes        |
| 12th May   | Revision Masterclass – Organic Chemistry     |
| 19th May   |  |
| 26th May   |  |
| 2nd June   |  |
| 9th June   |  |
| 16th June  |  |
| 23rd June  |  |