

### Curriculum Sequencing Overview – Year 11 Combined Science

| Week   | 1  | 2   | 3   | 4   | 5   | 6   | 7  | 8   |
|--|--|---|---|---|---|---|--|---|
| <b>Unit Theme and Assessed Knowledge/ Skills</b> | C6 Rates of Reaction   |   | C7 Hydrocarbons   |   | C8 Chemical Analysis  | C9 Atmosphere   |  | C10 Resources   |
| <b>Lesson Topics Sequence &amp; Content</b>      | C6.1 Measuring Rates part 1<br><br>C6.2 Measuring Rates part 2<br><br>C6.3 RP Concentration part 1<br><br>C6.4 RP Concentration part 2 | C6.5 Surface Area<br><br>C6.6 Collision Theory<br><br>C6.7 Catalysts<br><br>C6.8 Reversible Reactions | <b>C6 Review &amp; Assess</b><br><br>C7.1 Crude Oil & Hydrocarbons<br><br>C7.2 Fractional Distillation<br><br>C7.3 Properties of hydrocarbons | C7.4 Cracking & Alkenes<br><br>C7.5 Combustion<br><br><b>C7 Review &amp; Assess</b><br><br>C8.1 Pure Substances | C8.2 Formulations<br><br>C8.3 Chromatography part 1<br><br>C8.4 Chromatography part 2<br><br><b>C8 Review &amp; Assess</b><br><br>C9.1 Current Atmosphere | C9.2 Early Atmosphere<br><br>C9.3 Evolution of Atmosphere<br><br>C9.4 Greenhouse Gases<br><br>C9.5 Climate Change | C9.6 Carbon Footprint<br><br>C9.7 Atmospheric Pollutants<br><br><b>C9 Review &amp; Assess</b><br><br>C10.1 Earths resources<br><br>C10.2 Potable Water | C10.3 RP Potable Water (part 1)<br><br>C10.4 RP Potable Water (part 2)<br><br>C10.5 Waste Water<br><br>C10.6 Life Cycle Assessments |
| <b>Key Assessments</b>                           |  |   | <b>Chem 6</b>   | <b>Chem 7</b>   | <b>Chem 8</b>   |   | <b>Chem 9</b>  |   |



| Week   | 9   | 10  | 11              | 12  | 13   | 14   | 15   | 16   |
|--|---|---|-----------------|---|--|--|--|--|
| <b>Unit Theme and Assessed Knowledge/ Skills</b> | Chem 10   | Mock Exams                                      |                 |   | Phys 5 Forces  |  |  |  |
| <b>Lesson Topics Sequence &amp; Content</b>      | C10.7 Reduce, Re-use, Recycle<br><br><b>C10 Review &amp; Assess</b><br><br>Revision - P1<br><br>Revision - P1 | <b>Mocks:</b><br><br>Biol 1<br>Chem 2<br>Phys 1 | Mocks & Reviews | Mock Reviews<br><br>Phys 5.1 Scalar & Vector<br><br>Phys 5.2 Heavy or Massive | Phys 5.3 Resultant Forces<br><br>Phys 5.4 Free-Body Diagrams<br><br>Phys 5.6 Work & Energy | P5.7 Forces & Elasticity<br><br>P5.8 RP Forces in Springs<br><br>P5.9 Work done on springs & <b>P5 Forces basics assess</b><br><br>P5.15 Distance, Displacement, Speed, Velocity | P5.16 Distance-time graphs<br><br>P5.17 Acceleration & Deceleration<br><br>P5.18 Velocity-time graphs<br><br>P5.19 Motion equations (only those on spec please!) | P5.20 Terminal Velocity<br><br>P5.21 Newtons 1 <sup>st</sup> Law<br><br>P5.22 Newtons 2 <sup>nd</sup> Law<br><br>P5.23 RP F=ma |
| <b>Key Assessments</b>                           | <b>Chem 10</b>  | <b>Mock – B1/C2/P1</b>                          |                 |   |  | <b>P5 Forces</b>   |  |  |



| Week   | 17  | 18  | 19   | 20                         | 21              | 22  | 23   | 24   |
|--|---|---|--|----------------------------|-----------------|---|--|--|
| <b>Unit Theme and Assessed Knowledge/ Skills</b> | P5 Forces   | P6 Waves  |  | Mocks                      |                 | P6 Waves  | P7 Electromagnetism  | Mock   |
| <b>Lesson Topics Sequence &amp; Content</b>      | P5.24 Newtons 3 <sup>rd</sup> Law<br>P5.25 Stopping Distances<br>P5.26 Energy when stopping<br><b>P5 Forces - Motion Assessment</b> | P6.1 Waves<br>P6.2 Transverse & Longitudinal<br>P6.3 Wave Speed<br>P6.4 RP Wave Speed | P6.5 Refraction<br>P6.6 EM Spectrum<br>P6.7 Uses of EM Waves | <b>Mocks Chem 1 Biol 2</b> | Mocks & Reviews | P6.14 RP infra-red<br>P6.15 Gamma, X-Rays & Ultraviolet<br><b>P6 Waves Assess</b> | P7.1 Magnetism basics<br>P7.2 Magnetic fields<br>P7.3 Solenoids<br>P7.4 Electromagnets | Phys 2 Forces Revision<br>Phys 2 Waves Revision<br><b>Phys 2 MOCK EXAM</b> |
| <b>Key Assessments</b>                           | P5 Motion   |   |  | <b>Mocks – C1 &amp; B2</b> |                 | P6 Waves  |  | <b>Phys 2 Mock</b>   |



| Week   | 25           | 26              | 27              | 28              | 29              | 30                          | 31                           | 32  |  |
|--|--------------|-----------------|-----------------|-----------------|-----------------|-----------------------------|------------------------------|---|--|
| <b>Unit Theme and Assessed Knowledge/ Skills</b> | Mock Reviews | Revision        |                 |                 |                 |                             | GCSE Exams                   |   |  |
| <b>Lesson Topics Sequence &amp; Content</b>      |              | Phys 1 Revision | Phys 1 Revision | Chem 1 Revision | Biol 1 Revision | GCSEs Start<br>Biol Paper 1 | Chem Paper 1<br>Phys Paper 1 | Biology Paper 2<br>Chemistry Paper 2<br>Physics Paper 2 |  |
| <b>Key Assessments</b>                           |              |                 |                 |                 |                 | GCSE B1                     | GCSE C1<br>GCSE P1           | GCSE B2<br>GCSE C2<br>GCSE P2                           |  |