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| **Trilogy**  **Year 11**  **2021\_2022** | In year 11 you will learn: **Biology** - About the structure of DNA and how genes work. How and why cells divide and how characteristics are inherited from one generation to another; What causes variation and the effects on the individual, how variation and natural selection lead to evolution of new species and what causes extinctions. **Chemistry** - About structure, properties and reactions of organic molecules. How we can test and analyse substances to assess structure, identity and purity. How the Earth’s atmosphere has changed over time, the effects and consequences of human activity on the atmosphere and how we can reduce our impact. **Physics** -:How waves transfer energy and information. How magnetic fields can be used to produce electrical current, How motors and Transformers work.  Topic sections refer to Collins connect online textbook. |

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **Topic P6 Waves** | | | |  |  |  | |
| Weekly Homework Tasks  **TASSOMAI REVISION** | |  | Mid Topic Assessment |  |  |  | End of Topic P6 Test |
| **Key Knowledge concept =** Transferring energy or information by waves  **Attitudes and Skills TENSILE:** Enquiry  **Numeracy=** Using equations | | Required practical  Measuring wavelength, frequency and speed |  |  |  | Required Practical  IR absorption affected by surface |  |
| **Collins connect Topic and Page** Please log into Collins Connect and complete the questions on the pages. Links are to resources that you may find helpful (BBC Bitesize notes, videos and tests / Oak Academy videos etc) | | | | | | | |
| **Topic B8 Ecology continued from Yr 10** | | | | | **Topic C4   CHEMICAL CHANGES** | |  |
| Weekly Homework Tasks  **TASSOMAI REVISION** | |  |  | End of Topic B6 Test | Weekly Hwk Tasks  **TASSOMAI REVISION** | |  |
| **Key Knowledge concept =** Interdependence  **Attitudes and Skills TENSILE**: Independence, Literacy  **Numeracy** = Estimation, graph skills | |  |  |  | **Key knowledge concept** = Electron transfer and Redox reactions  **Attitudes and Skills TENSILE:**Numeracy, independence, enquiry  **Numeracy** = Order of magnification | | Required Practical – Preparation of a soluble salt |
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| 9 | 10 | 11 | 12 | 13 | 14 | 15 | **16** |
| **Topic C7 Hydrocarbons** | | | **Topic C8 Chemical Analysis** | | |  |  |
| Weekly Homework Tasks | Mid Topic Assessment | End of Topic C7 Test |  | Mid Topic Assessment | End of Topic C8 Test | **REVISION & Mock Exam** | **REVISION & Mock Exam** |
| **Key Knowledge concept =** Intermolecular Forces  **Attitudes and Skills**  **TENSILE:**Numeracy, Literacy, Enquiry  **Numeracy** = Visulalise and represent 3D models | | | **Key Knowledge concept =** Chromatography  **Attitudes and Skills**  **TENSILE:**Enquiry, Numeracy  **Numeracy** = calculate Rf values | | **Required Practical** = Chromatography |  |  |
| **Topic C4 Cont** | | | | | |  |  |
|  | Mid Topic Assessment |  |  |  | Mid Topic Assessment |  |  |
|  |  |  |  | Required practical - Electrolysis |  |  |  |

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| 17 | 18 | | 19 | 20 | | 21 | **22** | | 23 | 24 |
| **P7 Electromagnetism** | | | | | | | **P5 Forces** | | | |
|  | | | Mid Topic Assessment |  | | End of Topic P7 Test | Weekly Homework Tasks  **TASSOMAI REVISION** | | |  |
| **Key Knowledge concept =** The link between electricity and magnetism  **Attitudes and Skills**  **TENSILE:**Numeracy, Solving Problems  **Numeracy** = Rearranging equations | | |  |  | |  | **Key Knowledge concept =** Forces and acceleration  **Attitudes and Skills**  **TENSILE:**Numeracy, Independence  **Numeracy** = Making estimates of calculations | | |  |
| **Topic B6 Genetics** | | | | | | **Topic B7 Variation and Evolution** | | | | |
| Weekly Homework Tasks  **TASSOMAI REVISION** | | Mid Topic |  | | End of Topic B6 Test |  | |  | Mid Topic Assessment |  |
| **Key Knowledge concept** Small sections of DNA are called genes and that genes are codes for proteins.  **Attitudes and Skills**  **TENSILE:** Literacy  **Numeracy** = Fractions, ratio and probability | | | |  | | **Key Knowledge concept =** Evidence for evolution  **Attitudes and Skills**  **TENSILE:**Numeracy and enquiry  **Numeracy** = Using charts and graphs to display data | | | |  |

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| 25 | 26 | 27 | **28** | 29 | 30 | 31 | 32 |
| **P5 Cont….** | |  |  | **C9 Atmosphere recap** | |  |  |
| Mid Topic assessment |  |  | End of Topic P5 Test |  |  |  |  |
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| **C10 Sustainable Chemistry** | | | | |  |  |  |
| Weekly Homework Tasks  **TASSOMAI REVISION** | | Mid Topic Assessment |  | End of Topic C10 Test |  |  |  |
| **Key Knowledge concept =** Life cycle assessments and recycling  **Attitudes and Skills TENSILE: Numeracy** = translate between graphical and numerical values | |  |  |  |  |  |  |

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| **33** | 34 | 35 | 36 | 37 | 38 | 39 |  |
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