



# CURRICULUM MAP – Year 10 GCSE Biology

Mastering qualifications Year 10 Term Autumn 14 weeks	Mastering qualifications Year 10 Term Spring 12 weeks	Mastering qualifications Year 10 Term Summer 14 weeks
<p><b>KS4 NC: Health, disease and the development of medicines</b>  <b>B4 - Organising animals and plants</b>  <b>B5 - Communicable diseases</b>  <b>B6 - Preventing and treating diseases</b>  <b>KS3 NC Content links</b>  <b>Health, Nutrition and digestion</b>  <b>KS3 NC: Working Scientifically</b>  <b>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</b>  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC): The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Microbiology</b>  <b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills  <b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs  <b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions  <b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment  <b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, cultural awareness  <b>SMSC</b>  <b>Learning about ourselves and how we function or life around us and how it functions alongside the impacts of our interactions with this life, The use of animals in testing for medical advances and when this can be acceptable, the publication by a doctor that the MMR vaccine is linked to autism without rigorous scientific testing and the implications of this on the health of a generation of children in the UK.</b>  <b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions  <b>Reports to parents :</b>  <b>Extra -Curricular opportunities and Trips:</b>  <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS Aspiring Scientist</li> <li>Inter-house and Inter school competitions</li> </ul> </p>	<p><b>KS4 NC: Health, disease and the development of medicines and Photosynthesis, cell biology</b>  <b>B7 - Non- communicable diseases</b>  <b>B8 – Photosynthesis</b>  <b>B9 - Respiration</b>  <b>KS3 NC Content links</b>  <b>Health, nutrition and digestion, photosynthesis, cellular respiration</b>  <b>KS3 NC: Working Scientifically</b>  <b>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</b>  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC): The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Photosynthesis,</b>  <b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills  <b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs  <b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions  <b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment  <b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness  <b>SMSC</b>  <b>The impact of diet, exercise and drugs on our health, Respiration and Exercise,</b>  <b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions  <b>Reports to parents :</b>  <b>Extra -Curricular opportunities and Trips:</b>  <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> <li>Inter-house and Inter school competitions - Science week</li> </ul> </p>	<p><b>KS4 NC: Cell Biology, Coordination and control</b>  <b>B10 - The human nervous system</b>  <b>B11 - Hormonal coordination</b>  <b>KS3 NC Content links: the skeletal and muscular systems,</b>  <b>KS3 NC: Working Scientifically</b>  <b>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</b>  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC): The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Reaction time</b>  <b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills  <b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs  <b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions  <b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment  <b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness  <b>SMSC</b>  <b>Learning about ourselves and how we function: Nerves and Hormones, Learning about ourselves and how we function: kidney functions, thermoregulation and heart beat to control the internal conditions, contraceptive hormone treatments and consider the positives and negatives of this on health,</b>  <b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions  <b>Paper 1 Biology- 1hr 45 minutes</b>  <b>Year 10 End of year</b>  <b>Extra -Curricular opportunities and Trips:</b>  <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> </ul> </p>

*The progressive, inclusive curriculum ‘skills, knowledge and concepts: literacy, life skills and enrichment’*



# CURRICULUM MAP – Year 11 GCSE Biology

Mastering qualifications Year 11 Term - Autumn 14 weeks	Mastering qualifications Year 11 Term - Spring 12 weeks	Mastering qualifications Year 11 Term - Summer 8 weeks
<p><b>KS4 NC: Cell Biology, Coordination and control</b></p> <p><b>B12 – Homeostasis in action</b></p> <p><b>B13 – Reproduction</b></p> <p><b>B14 - Variation and evolution</b></p> <p><b>KS3 NC Content links:</b> <a href="#">The skeletal and muscular system, Reproduction, KS3 NC: Working Scientifically</a></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Assessment objectives:</b> AO1, AO2, AO3</p> <p><b>Working scientifically</b> (<a href="#">KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature</a>)</p> <p><b>Required Practical:</b> <b>Plant responses</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b></p> <p><b>Learning about ourselves and how we function:</b> <a href="#">kidney functions, thermoregulation and heart beat to control the internal conditions, contraceptive hormone treatments and consider the positives and negatives of this on health. the thalidomide drug and how it was used without correct testing and the consequences of this, Focus on the ethics behind IVF and use informed decisions on peoples life situations to decide / debate which couples should be given the limited availability of IVF.</a></p> <p><b>Assessments:</b> End of chapter tests PPE1 - Paper 1 Biology – 1 hour 45 minutes</p> <p><b>Reports to parents</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> <li>• Inter-house and Inter school competitions</li> </ul>	<p><b>KS4 NC: Evolution, inheritance and variation, ecosystems</b></p> <p><b>B15 – Genetics and evolution</b></p> <p><b>B16 – Adaptions and interdependence</b></p> <p><b>B16 – Organisation of an ecosystem</b></p> <p><b>B17 – The effect of human interaction on ecosystems and biodiversity</b></p> <p><b>KS3 NC Content links</b> <a href="#">inheritance, chromosomes, DNA and genes, relationships un an ecosystem</a></p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Assessment objectives:</b> AO1, AO2, AO3</p> <p><b>Working scientifically</b> (<a href="#">KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature</a>)</p> <p><b>Required Practical:</b> <b>Field investigations, decay</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b></p> <p><b>Learning about ourselves and how we function:</b> <a href="#">Genetics, Genetic Engineering and cloning - Use understanding of cloning techniques to evaluate whether embryo cloning should be allowed and to what level.</a></p> <p><b>End of chapter tests</b> PPE 2- Paper 2 Biology – 1 hour 45 minutes</p> <p><b>Reports to parents</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> <li>• Inter-house and Inter school competitions - Science week</li> </ul>	<ul style="list-style-type: none"> <li>• Paper 1 revision for Biology</li> <li>• Paper 2 revision for Biology</li> </ul> <p><b>Assessment objectives:</b> AO1, AO2, AO3</p> <p><b>Working scientifically</b> (<a href="#">KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature</a>)</p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Required Practical:</b> <b>Revision of all practicals encountered within the GCSE, with a focus on writing the methods.</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b></p> <p><b>Revision of all the elements that have been encountered during the GCSE course.</b></p> <p><b>Assessments:</b> Kerboodle End of Paper 2 test Walking talking mock</p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> </ul>

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# CURRICULUM MAP – Year 10 GCSE Chemistry

Mastering qualifications Year 10 Term Autumn 14 weeks	Mastering qualifications Year 10 Term Spring 12 weeks	Mastering qualifications Year 10 Term Summer 14 weeks
<p> <b>KS4 NC: Chemical changes and Energy changes in chemistry</b>  <b>C4 - Chemical calculations</b>  <b>C5 - Chemical changes</b>  <b>KS3 NC Content links: atoms, elements and compounds, chemical reactions, KS3 NC: Working Scientifically</b>            Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required Practical: Making salts, neutralisation</b>  <b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills  <b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs  <b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions  <b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment  <b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, cultural awareness  <b>SMSC</b>            Regular Group work with people from different Religious, Ethnic and Social backgrounds.  <b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions  <b>Reports to parents :</b>   <b>Extra -Curricular opportunities and Trips:</b> <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> <li>Inter-house and Inter school competitions</li> </ul> </p>	<p> <b>KS4 NC: Chemical changes and Energy changes in chemistry</b>  <b>C6 - Electrolysis</b>  <b>C7 - Energy changes</b>  <b>KS3 NC Content links: energetics, physical changes</b>  <b>KS3 NC: Working Scientifically</b>            Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Electrolysis, Temperature changes</b>  <b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills  <b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs  <b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions  <b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment  <b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness  <b>SMSC</b>            Regular Group work with people from different Religious, Ethnic and Social backgrounds.  <b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions  <b>Reports to parents :</b>   <b>Extra -Curricular opportunities and Trips:</b> <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> <li>Inter-house and Inter school competitions - Science week</li> </ul> </p>	<p> <b>KS4 NC: Rate and extent of chemical change</b>  <b>C8 - Rates and equilibrium</b>  <b>C9 - Crude oil and fuels</b>  <b>KS3 NC Content links: chemical reactions</b>  <b>KS3 NC: Working Scientifically</b>            Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Rates of reaction</b>  <b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills  <b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs  <b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions  <b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment  <b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness  <b>SMSC</b>            Students study the different scientists that have brought about our understanding of science. Students interpret and explain the findings of these key scientists.  <b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions  <b>Paper 1 Chemistry– 1hr 45 minutes</b>  <b>Reports to parents</b>   <b>Extra -Curricular opportunities and Trips:</b> <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> </ul> </p>

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# CURRICULUM MAP – Year 11 GCSE Chemistry

Mastering qualifications Year 11 Term - Autumn 14 weeks	Mastering qualifications Year 11 Term - Spring 12 weeks	Mastering qualifications Year 11 Term - Summer 8 weeks
<p><b>KS4 NC: Chemical and allied industries, Chemical analysis</b></p> <p><b>C8 - Rates and equilibrium</b></p> <p><b>C9 - Crude oil and fuels</b></p> <p><b>C10 – Organic reactions</b></p> <p><b>C11 - Polymers</b></p> <p><b>KS3 NC Content links: materials, pure and impure substances</b></p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Assessment objectives: AO1, AO2, AO3</b></p> <p><b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b></p> <p><b>Required Practical: Chromatography, identifying ions</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b> <b>Consider the impact of multiple chemical and industrial processes on the environment - including the combustion of hydrocarbons and the impacts of global warming and acid rain on the environment</b></p> <p><b>Assessments:</b> End of chapter tests PPE Paper 1 Chemistry – 1 hour 45 minutes</p> <p><b>Reports to parents</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> <li>Inter-house and Inter school competitions</li> </ul>	<p><b>KS4 NC: Earth and atmospheric science</b></p> <p><b>C12 - Chemical analysis</b></p> <p><b>C13 – Our atmosphere</b></p> <p><b>C14 - The Earth’s resources</b></p> <p><b>C15 - Using our resources</b></p> <p><b>KS3 NC Content links earth and atmosphere, Energy and waves</b></p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Assessment objectives: AO1, AO2, AO3</b></p> <p><b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b></p> <p><b>Required Practical: Water purification</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b> <b>Consider the impact of multiple chemical and industrial processes on the environment - including the combustion of hydrocarbons and the impacts of global warming and acid rain on the environment. the production of ammonia during the Haber process and usage of excessive fertilisers on food chains are considered in detail.</b></p> <p><b>Assessments:</b> End of chapter tests PPE Paper 2 Chemistry – 1 hour 45 minutes</p> <p><b>Reports to parents :</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> <li>Inter-house and Inter school competitions - Science week</li> </ul>	<ul style="list-style-type: none"> <li>Paper 1 revision for Biology, Chemistry and Physics</li> <li>Paper 2 revision for Biology, Chemistry and Physics</li> </ul> <p><b>Assessment objectives: AO1, AO2, AO3</b></p> <p><b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b></p> <p><b>Required Practical: Revision of all practicals encountered within the GCSE, with a focus on writing the methods.</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b> <b>Revision of all the elements that have been encountered during the GCSE course.</b></p> <p><b>Assessments:</b> Kerboodle End of Paper 2 test Walking talking mock</p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>Virtual science club –via TEAMS -Aspiring Scientist</li> </ul>

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# CURRICULUM MAP – Year 10 GCSE Physics

Mastering qualifications Year 10 Term Autumn 14 weeks	Mastering qualifications Year 10 Term Spring 12 weeks	Mastering qualifications Year 10 Term Summer 14 weeks
<p><b>KS4 NC: Electricity</b>  <b>P4 - Electrical circuits</b>  <b>P5 - Electricity in the home</b>  <b>P6 - Molecules and matter</b>  <b>KS3 NC Content links: current electricity</b>  <b>KS3 NC: Working Scientifically</b>            Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required Practical: Resistance, I-V characteristics</b></p> <p><b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment</p> <p><b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, cultural awareness</p> <p><b>SMSC</b>  <b>Investigating the cost of electricity in the home and ways of saving energy.</b>  <b>Environmental and economic effects of using electricity and sustainable living.</b></p> <p><b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions</p> <p><b>Reports to parents :</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> <li>• Inter-house and Inter school competitions</li> </ul>	<p><b>KS4 NC: The structure of matter, Atomic structure</b>  <b>P7 – Radioactivity</b>  <b>P8 - Forces in balance</b>  <b>P9 – Motion</b>  <b>KS3 NC Content links: particle model, energy in matter, Balanced forces, motion</b>  <b>KS3 NC: Working Scientifically</b>            Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Density</b></p> <p><b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment</p> <p><b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b>            Radiation- nuclear power and its uses, Ernst Rutherford and the work of Geiger in discovering the structure of the atom and the work on radioactive decay ,</p> <p><b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions</p> <p><b>Reports to parents :</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> <li>• Inter-house and Inter school competitions - Science week</li> </ul>	<p><b>KS4 NC: Forces and motion</b>  <b>P10 - Force and motion</b>  <b>P11 – Forces and pressure</b>  <b>KS3 NC Content links: Forces, Motion</b>  <b>KS3 NC: Working Scientifically</b>            Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements  <b>Assessment objectives: AO1, AO2, AO3</b>  <b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b>  <b>Required practical: Acceleration, Force and extension</b></p> <p><b>Literacy foci</b>            Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b>            Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b>            Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b>            KS4 DO NOW starter activities, Exam question starters from previous topics            One week revising and teaching students how to revise before EOC assessment</p> <p><b>Enrichment/life and work skills:</b>            Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b>  <b>Investigating stopping distances and factors that affect these in relation to driving cars unsafely, Laws relating to drink driving</b></p> <p><b>Assessments:</b>            End of chapter tests, Exam chapter examination homework questions</p> <p><b>Paper 1 Physics – 1hr 45 minutes</b></p> <p><b>Reports to parents</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> </ul>

*The progressive, inclusive curriculum ‘skills, knowledge and concepts: literacy, life skills and enrichment’*





# CURRICULUM MAP – Year 11 GCSE Physics

Mastering qualifications Year 11 Term - Autumn 12 weeks	Mastering qualifications Year 11 Term - Spring 11 weeks	Mastering qualifications Year 11 Term - Summer 4 weeks
<p><b>KS4 NC: Forces and motion, wave motion</b></p> <p><b>P8 - Forces in balance - Recovery</b></p> <p><b>P9 – Motion</b></p> <p><b>P10 - Force and motion</b></p> <p><b>P11 – Forces and pressure</b></p> <p><b>P12 - Wave properties</b></p> <p><b>KS3 NC Content links: observed waves</b></p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Assessment objectives: AO1, AO2, AO3</b></p> <p><b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b></p> <p><b>Required Practical: Waves, Light</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b></p> <p><b>The use of mobile phones and smart technology</b></p> <p><b>Assessments:</b> End of chapter tests PPE Paper 1 GCSE Physics – 1 hour 45 minutes <b>Years 11 PPE 1 (Monday 8th November to Friday 19th November)</b> <b>Reports to parents : Year 11 Parents Evening 1– Thursday 9th December</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> <li>• Inter-house and Inter school competitions</li> </ul>	<p><b>KS4 NC: Wave motion, Magnetism and electromagnetism</b></p> <p><b>P13 – Electromagnetic waves</b></p> <p><b>P14 - Light</b></p> <p><b>P15 - Electromagnetism</b></p> <p><b>P16 - Space</b></p> <p><b>KS3 NC Content links: static electricity, magnetism</b></p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Assessment objectives: AO1, AO2, AO3</b></p> <p><b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b></p> <p><b>Required Practical: Radiation and absorption</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b></p> <p><b>Investigating the possibility of colonising Mars, Theories to explain the beginning of the universe and expansion of the universe.</b></p> <p><b>Assessments:</b> End of chapter tests PPE Paper 2 Physics – 1 hour 45 minutes PPE2 – Years 11 (Monday 28th February to Friday 11th March) <b>Reports to parents :Year 11 Parents Evening 2 (Thursday 31st March)</b></p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> <li>• Inter-house and Inter school competitions - Science week</li> </ul>	<ul style="list-style-type: none"> <li>• Paper 1 revision for GCSE Physics</li> <li>• Paper 2 revision for GCSE Physics</li> </ul> <p><b>Assessment objectives: AO1, AO2, AO3</b></p> <p><b>Working scientifically (KS4 NC: The development of scientific thinking, Experimental skills and strategies, Analysis and evaluation, Vocabulary, units, symbols and nomenclature)</b></p> <p><b>KS3 NC: Working Scientifically</b></p> <p>Scientific attitudes, experimental skills and investigations, analysis and evaluation, measurements</p> <p><b>Required Practical: Revision of all practicals encountered within the GCSE, with a focus on writing the methods.</b></p> <p><b>Literacy foci</b> Reading skills, Comprehension skills, Science glossary of terms, Writing skills</p> <p><b>Numeracy foci</b> Arithmetic and numerical computation, Handling data, Algebra, Graphs</p> <p><b>Homework</b> Kerboodle online tasks, Doodle online tasks, Seneca online tasks, End of chapter examination questions</p> <p><b>Revisiting, revising, remembering opportunities</b> KS4 DO NOW starter activities, Exam question starters from previous topics, one week revising and teaching students how to revise before EOC assessment, period 6</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration, research skills, public speaking, empathy, time management, perseverance, cultural awareness</p> <p><b>SMSC</b></p> <p><b>Revision of all the elements that have been encountered during the GCSE course.</b></p> <p><b>Assessments:</b> Kerboodle End of Paper 2 test Walking talking mock</p> <p><b>Extra -Curricular opportunities and Trips:</b></p> <ul style="list-style-type: none"> <li>• Virtual science club –via TEAMS -Aspiring Scientist</li> </ul>

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