

	Autumn term	Spring term	Summer term
YEAR 7	<p>Knowledge: Note: Number indicate content lessons and does not include lessons for revision and test. Students will learn about key concepts including:</p> <ul style="list-style-type: none"> • Intro week/ safety lessons (3) • Cell Biology (5) • Forces (11) • Particle model (12) <p>Skills: Students will learn about safe practices in the laboratory, handling scientific equipment, collecting and recording data, using data to make conclusions.</p> <p>Numerical development:</p> <ul style="list-style-type: none"> • Drawing tables and graphs • Using the magnification equation • Analyzing pie charts <p>Literacy development:</p> <ul style="list-style-type: none"> • Vocab – keywords spelling tests • Extended writing 	<p>Knowledge: Note: Number indicate content lessons and does not include lessons for revision and test. Students will learn about key concepts including:</p> <ul style="list-style-type: none"> • Human biology (13) • Chemical changes (4) • Space (5) <p>Skills: Students will learn about safe practices in the laboratory, handling scientific equipment and making scientific measurements, identifying variables, collecting and using data.</p> <p>Numerical development:</p> <ul style="list-style-type: none"> • Drawing tables and graphs • Drawing lines of best fit • Using scientific formula • Calculating the mean. <p>Literacy development:</p> <ul style="list-style-type: none"> • Vocab – keywords spelling tests • Extended writing 	<p>Knowledge: Note: Number indicate content lessons and does not include lessons for revision and test. Students will learn about key concepts including:</p> <ul style="list-style-type: none"> • Atomic structure (9) • Sound and light (10) <p>Skills: Students will learn about safe practices in the laboratory, identifying variables, handling scientific equipment and making scientific measurements, collecting and using data.</p> <p>Numerical development</p> <ul style="list-style-type: none"> • Using numerical data • Using ratios • Balancing simple equations • Evaluating models <p>Literacy development:</p> <ul style="list-style-type: none"> • Vocab – keywords spelling tests • Extended writing
YEAR 8	<p>Knowledge: Note: Number indicate content lessons and does not include lessons for revision and test. Students will continue to learn about and develop key concepts further including:</p> <ul style="list-style-type: none"> • Plant biology (7) • Energy (10) • The Earth and resources (12) <p>Skills: Students will develop skills such as evaluating models, making scientific measurements, identifying variables, assessing risks and hazards, collecting accurate data to make conclusions and evaluations.</p> <p>Numerical development:</p> <ul style="list-style-type: none"> • Drawing tables and graphs • Drawing lines or curves of best fit • Using scientific formula • Calculating the mean, mode and median. <p>Literacy development:</p> <ul style="list-style-type: none"> • Vocab – keywords spelling tests • Extended writing 	<p>Knowledge: Note: Number indicate content lessons and does not include lessons for revision and test. Students will continue to learn about and develop key concepts further including:</p> <ul style="list-style-type: none"> • Healthy lifestyle (10) • Reactions (11) <p>Skills: Students will develop skills such as making scientific measurements, identifying variables, assessing risks and hazards, collecting accurate data to make conclusions and evaluations.</p> <p>Numerical development:</p> <ul style="list-style-type: none"> • Drawing tables and graphs • Drawing lines or curves of best fit • Converting units • Using scientific formula • Calculating the mean. <p>Literacy development:</p> <ul style="list-style-type: none"> • Vocab – keywords spelling tests • Extended writing 	<p>Knowledge: Note: Number indicate content lessons and does not include lessons for revision and test. Students will continue to learn about and develop key concepts further including:</p> <ul style="list-style-type: none"> • Electricity (10) • Ecology and evolution (11) • Scientific skills (8) <p>Skills: Students will develop skills such as making scientific measurements, identifying variables, assessing risks and hazards, collecting accurate data to make conclusions and evaluations.</p> <p>Numerical development:</p> <ul style="list-style-type: none"> • Drawing tables and graphs • Drawing lines or curves of best fit • Balancing simple equations • Using scientific formula • Calculating the mean. <p>Literacy development:</p> <ul style="list-style-type: none"> • Vocab – keywords spelling tests • Extended writing

Knowledge:

Students cover the topics:

- Introduction (skills) module
- Cell biology (19)
- Atomic structure and the periodic table (18)

Skills:

Students will develop skills such as:

- Carry out Practical investigations and experiments safely and fairly
- Using complex scientific equipment and making accurate measurements
- Develop models to conceptualise key ideas
- Develop their capacity to knowledge to new situations
- Collect and use data to draw reliable conclusions
- To use formulas to evaluate a variety of variables
- To plot data and describe pattern accurately.

Knowledge:

Students cover the topics:

- Energy (25)
- Energy Changes (10)

Skills:

Students will develop skills such as:

- Carry out Practical investigations and experiments safely and fairly
- Using complex scientific equipment and making accurate measurements
- Develop models to conceptualise key ideas
- Develop their capacity to knowledge to new situations
- Collect and use data to draw reliable conclusions
- To use formulas to evaluate a variety of variables
- To plot data and describe pattern accurately.

Knowledge:

Students cover the topics:

- Particle model of matter (11)
- Bonding and structure (14)
- Bioenergetics (13)

Skills:

Students will develop skills such as:

- Carry out Practical investigations and experiments safely and fairly
- Using complex scientific equipment and making accurate measurements
- Develop models to conceptualise key ideas
- Develop their capacity to knowledge to new situations
- Collect and use data to draw reliable conclusions
- To use formulas to evaluate a variety of variables
- To plot data and describe pattern accurately.

<p>YEAR 10 Triple</p>	<p>Knowledge: Students cover the topics:</p> <ul style="list-style-type: none"> • Organisation (26) • Atomic structure (Phy) (12) • Electricity (18) • Chemical changes (15) • Quantitative Chemistry (14) <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. 	<p>Knowledge: Students cover the topics:</p> <ul style="list-style-type: none"> • Infection and response (22) • Start Homeostasis and response (26) • Forces (30) • Rate and extent of chemical change (14) • Organic Chemistry (15) <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. 	<p>Knowledge: Students cover the topics:</p> <ul style="list-style-type: none"> • Homeostasis and response (26) • Ecology required practicals • Waves (25) • Using resources (19) • Preparation for mock exams <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. <p>Y10 Mock Exams for Paper 1</p>
<p>YEAR 11 Triple Science</p>	<p>Knowledge: Students cover the topics: Inheritance, variation and evolution (30) Waves (28) Organic Chemistry (15) Chemistry of the atmosphere (7) Preparation for mock exams</p> <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. <p>Y11 Mock Exams for Paper 1</p>	<p>Knowledge: Students cover the topics: Space (8) Magnetism and electromagnetism (11) Ecology (24) Chemical analysis (13) Preparation for mock exams</p> <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. <p>Y11 Mock Exams for Paper 2</p>	<p>Exam Revision and Preparation Sessions.</p> <p>Skills: Students will develop a variety a revision techniques including recall activities, revision challenge grid, practice exam questions and past exam papers, making mind maps, and making revision flash cards.</p> <p>GCSE Exams start</p>

<p>YEAR 10 Combined Science</p>	<p>Knowledge: Students cover the topics:</p> <ul style="list-style-type: none"> • Organisation (19) • Atomic structure (Phy) (7) • Electricity (14) • Chemical changes (17) • Rate and extent of chemical change (11) <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. 	<p>Knowledge: Students cover the topics:</p> <ul style="list-style-type: none"> • Infection and response (18) • Forces (20) • Quantitative Chemistry (6) • Chemistry of the atmosphere (7) <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. 	<p>Knowledge: Students cover the topics:</p> <ul style="list-style-type: none"> • Homeostasis and response (14) • Waves (12) • Preparation for mock exams • Using resources (9) <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. <p><u>Y10 Mock Exams for Paper 1</u></p>
<p>Year 11 Combined Science</p>	<p>Knowledge: Students cover the topics: Inheritance, variation and evolution (19) Waves (12) Organic Chemistry (6) Ecology (19) Preparation for mock exams</p> <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. <p><u>Y11 Mock Exams for Paper 1</u></p>	<p>Knowledge: Students cover the topics: Ecology (19) Magnetism and electromagnetism (5) Chemical analysis (6) Preparation for mock exams</p> <p>Skills: Students will develop skills such as:</p> <ul style="list-style-type: none"> • Carry out Practical investigations and experiments safely and fairly • Using complex scientific equipment and making accurate measurements • Develop models to conceptualise key ideas • Develop their capacity to knowledge to new situations • Collect and use data to draw reliable conclusions • To use formulas to evaluate a variety of variables • To plot data and describe pattern accurately. <p><u>Y11 Mock Exams for Paper 2</u></p>	<p>Exam Revision and Preparation Sessions.</p> <p>Skills: Students will develop a variety a revision techniques including recall activities, revision challenge grid, practice exam questions and past exam papers, making mind maps, and making revision flash cards.</p> <p>GCSE Exams start</p>