

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Exam board AQA – Combined science GCSE</b>					
<p><b><u>Biology</u></b> <b><u>Topics</u></b> B1 Cells (not including B1.3 Transport in cells)</p> <p><i><u>Themes</u></i> Types of cells, cell transport and cell division</p> <p><i><u>Assessment</u></i> B1 End of topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C1 Atomic structure and the Periodic Table</p> <p><i><u>Themes</u></i> Structure of the atom, isotopes and the organization of the Periodic table</p> <p><i><u>Assessment</u></i> C1 end of topic assessment</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B2 Principles of Organisation</p> <p><i><u>Themes</u></i> Digestive system, enzymes, circulatory system, respiratory system and transport in plants</p> <p><i><u>Assessment</u></i> B2 end of topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C2 Bonding, structure, and the properties of matter</p> <p><i><u>Themes</u></i> Structure and properties Ionic, covalent (simple and giant molecules) &amp; metallic bonding and</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B7 Adaptations, Interdependence &amp; Competition</p> <p><i><u>Themes</u></i> Distribution of organisms and feeding relationships</p> <p><i><u>Assessment</u></i> B7 mini topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C4 Chemical Changes</p> <p><i><u>Themes</u></i> Reactivity series, displacement reactions, salts, neutralization and strong &amp; weak acids</p> <p><i><u>Assessment</u></i> C4 mini topic assessment</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B7 Adaptations, Interdependence &amp; Competition</p> <p><i><u>Themes</u></i> Competition between organisms and adaptation of organisms</p> <p><i><u>Assessment</u></i> B7 end of topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C4 Chemical Changes C6 The rate and extent of chemical change</p> <p><i><u>Themes</u></i> Electrolysis, collision theory and effect of surface area, temperature, catalysts &amp; concentration on the</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B4 Bioenergetics</p> <p><i><u>Themes</u></i> Photosynthesis</p> <p><i><u>Assessment</u></i> B4 mini topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C6 The rate and extent of chemical change C5 Energy Changes</p> <p><i><u>Themes</u></i> Reversible reactions, dynamic equilibrium, exothermic &amp; endothermic reactions and bond energies</p> <p><i><u>Assessment</u></i> C6 and C5 end of topic assessment</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B4 Bioenergetics Revision of the topics covered in Year 9</p> <p><i><u>Themes</u></i> Respiration</p> <p><i><u>Assessment</u></i> B4 end of topic assessment and end of year exam</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C7 Organic Chemistry Revision of the topics covered in Year 9</p> <p><i><u>Themes</u></i> Fractional distillation of crude oil and hydrocarbons</p> <p><i><u>Assessment</u></i> C7 End of topic assessment and end of</p>

<p><b><u>Physics</u></b> <b><u>Topics</u></b> <b>P1 Energy</b></p> <p><u>Themes</u> Energy stores, conservation of energy, GPE, KE &amp; elastic energy stores</p> <p><u>Assessment</u> P1 mini topic assessment</p>	<p>nanoparticles</p> <p><u>Assessment</u> C2 end of topic assessment</p> <p><b><u>Physics</u></b> <b><u>Topics</u></b> <b>P1 Energy</b></p> <p><u>Themes</u> Energy dissipation, energy &amp; efficiency and energy &amp; power</p> <p><u>Assessment</u> P1 end of topic assessment</p>	<p><b><u>Physics</u></b> <b><u>Topics</u></b> <b>P6 Waves</b></p> <p><u>Themes</u> Nature and properties of waves, reflection, refraction</p> <p><u>Assessment</u> P6 mini topic assessment</p>	<p>rate of reaction.</p> <p><u>Assessment</u> C4 end of topic assessment</p> <p><b><u>Physics</u></b> <b><u>Topics</u></b> <b>P6 Waves</b></p> <p><u>Themes</u> Electromagnetic spectrum, properties of electromagnetic waves &amp; their uses</p> <p><u>Assessment</u> P6 end of topic assessment</p>	<p><b><u>Physics</u></b> <b><u>Topics</u></b> <b>P4 Atomic structure</b></p> <p><u>Themes</u> Structure of the atom and the discovery of the nucleus</p> <p><u>Assessment</u> P4 End of topic assessment</p>	<p>year exam</p> <p><b><u>Physics</u></b> <b><u>Topics</u></b> <b>P3 Particle model of matter</b> <b>Revision of the topics covered in Year 9</b></p> <p><u>Themes</u> Density, changes of state, internal energy and gas pressure</p> <p><u>Assessment</u> P3 End of topic assessment and end of year exam</p>
<p>Skills: Evaluate risks in an investigation Develop hypotheses</p>	<p>Skills: Select appropriate ways to communicate results Consider ethical issues that may arise from scientific developments</p>	<p>Skills: Using models to develop scientific explanations Drawing suitable conclusions</p>	<p>Skills: Drawing graphs Evaluating scientific methods</p>	<p>Skills: Make decisions based on the evaluation of scientific evidence and arguments.</p>	<p>Skills: Selecting appropriate apparatus for an investigation Interpreting observations and other data</p>
<p><i>British Values/SMSC:</i>  <i>Democracy; The rule of Law; Individual liberty; Mutual respect and tolerance of those of different faiths and beliefs.</i>  <i>Term 2 – The pros and cons of generating electricity and individual country responses to the energy crisis.</i>  <i>Term 4 – Respect for all living things and the environment.</i>  <i>Term 5 – The ethics surrounding genetic testing and screening.</i></p>					
<p><b>Enrichment/Extra Curriculum:</b></p> <ul style="list-style-type: none"> <li><i>National Science Week activities March 2018 &amp; Crest Award club.</i></li> </ul>					

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<p><b><u>Biology</u></b> <b><u>Topics</u></b> B5 Homeostasis and response</p> <p><i>Themes</i> Nervous system, hormonal control and blood sugar levels &amp; diabetes</p> <p><i>Assessment</i> B1 mini topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C7 Organic chemistry</p> <p><i>Themes</i> Fractional distillation of crude oil and hydrocarbons</p> <p><i>Assessment</i> C7 end of topic assessment</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B5 Homeostasis and response</p> <p><i>Themes</i> Negative feedback, reproduction, menstrual cycle and infertility problems</p> <p><i>Assessment</i> B1 end of topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C5 Energy changes</p> <p><i>Themes</i> Exothermic &amp; endothermic reactions and bond energies</p> <p><i>Assessment</i> C5 end of topic assessment</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B3 Infection and response</p> <p><i>Themes</i> Pathogens, diseases caused by pathogens, human defence responses, vaccination and antibiotics</p> <p><i>Assessment</i> B3 end of topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C4 Chemical changes</p> <p><i>Themes</i> Reactivity series, displacement reactions, salts and neutralization</p> <p><i>Assessment</i> C4 mini topic assessment</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B6 Inheritance, variation and evolution</p> <p><i>Themes</i> Cell division, inheritance in action, genetic disorders and variation</p> <p><i>Assessment</i> B6 mini topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C4 Chemical changes</p> <p><i>Themes</i> Strong &amp; weak acids and electrolysis</p> <p><i>Assessment</i> C4 end of topic assessment</p> <p><b><u>Physics</u></b></p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B6 Inheritance, variation and evolution</p> <p><i>Themes</i> Selective breeding, genetic engineering, evidence for evolution, extinction and classification</p> <p><i>Assessment</i> B6 end of topic assessment</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C9 Chemistry of the atmosphere</p> <p><i>Themes</i> History and evolution of the atmosphere, greenhouse gases and pollutants of the atmosphere</p>	<p><b><u>Biology</u></b> <b><u>Topics</u></b> B7 Ecosystems Revision of the topics covered in Year 10</p> <p><i>Themes</i> Recycling nutrients, pollution, deforestation and global warming</p> <p><i>Assessment</i> B7 end of topic assessment and end of year exam</p> <p><b><u>Chemistry</u></b> <b><u>Topics</u></b> C9 Chemistry of the atmosphere</p> <p><i>Themes</i> Finite and renewable resources, water recycling and reduce, reuse &amp; recycle</p> <p><i>Assessment</i></p>

<p><b>Physics</b> <b>Topics</b> <b>P4 Atomic structure</b></p> <p><u>Themes</u> Structure of the atom and the discovery of the nucleus</p> <p><u>Assessment</u> P4 end of topic assessment</p>	<p><b>Physics</b> <b>Topics</b> <b>P3 Particle model of matter</b></p> <p><u>Themes</u> Density, changes of state, internal energy and gas pressure</p> <p><u>Assessment</u> P3 end of topic assessment</p>	<p><b>Physics</b> <b>Topics</b> <b>P5 Forces</b></p> <p><u>Themes</u> Vectors, resultant forces, centre of mass and resolution of forces</p> <p><u>Assessment</u> P5 mini topic assessment</p>	<p><b>Topics</b> <b>P5 Forces and motion</b></p> <p><u>Themes</u> Distance, speed &amp; velocity-time graphs, acceleration, terminal velocity, braking and momentum</p> <p><u>Assessment</u> P5 end of topic assessment</p>	<p><u>Assessment</u> C9 mini topic assessment</p> <p><b>Physics</b> <b>Topics</b> <b>P7 Magnetism and electromagnetism</b></p> <p><u>Themes</u> Magnetic fields, magnetic fields of electric current and motor effect</p> <p><u>Assessment</u> P7 end of topic assessment</p>	<p>C9 end of topic assessment and end of year exam</p> <p><b>Physics</b> <b>Topics</b> <b>P6 Waves</b></p> <p><u>Themes</u> Nature and properties of waves, reflection, refraction</p> <p><u>Assessment</u> P6 end of topic assessment and end of year exam</p>
<p>Skills: Make decisions based on the evaluation of scientific evidence and arguments.</p>	<p>Skills: Selecting appropriate apparatus for an investigation Interpreting observations and other data</p>	<p>Skills: Evaluate risks in an investigation Develop hypotheses</p>	<p>Skills: Drawing graphs Evaluating scientific methods</p>	<p>Skills: Using models to develop scientific explanations Drawing suitable conclusions</p>	<p>Skills: Select appropriate ways to communicate results Consider ethical issues that may arise from scientific developments</p>
<p><i>SMSC/British Values:</i>  <i>Democracy; The rule of Law; Individual liberty; Mutual respect and tolerance of those of different faiths and beliefs.</i>  <i>Term 1 – Ethics around cloning, genetic engineering and artificial fertilisation.</i>  <i>Term 2 - Study of evolution and discussing the different ideas put forward for the origin of life.</i>  <i>Term 3 – International disasters and global problems that arise. Whose fault is it?</i>  <i>Term 4 – Use of Physics and unintended consequences in the Atomic bomb.</i></p>					
<p><b>Enrichment/Extra Curriculum:</b></p> <ul style="list-style-type: none"> <li><i>National Science Week activities March 2018 &amp; Crest Award club.</i></li> </ul>					

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Exam board AQA – Combined GCSE</b>					
<p><b>Topics</b> <b>Topics</b> <b>B1 Cell division &amp; B3 Non-communicable diseases</b></p> <p><i>Themes</i> Mitosis, meiosis, stem cells, cancer, smoking &amp; alcohol</p> <p><i>Assessment</i> End of topic assessment</p> <p><b>Chemistry</b> <b>Topics</b> <b>C8 Chemical analysis &amp; C9 Earth's resources</b></p> <p><i>Themes</i> Chromatography, evolving atmosphere, Greenhouse gases &amp; climate change</p> <p><i>Assessment</i> End of topic assessment</p>	<p><b>Topics</b> <b>Biology</b> <b>B7 Ecology</b></p> <p><i>Themes</i> Adaptations, interdependence and competition</p> <p><i>Assessment</i> End of topic assessment and Mock exam</p> <p><b>Topics</b> <b>Chemistry</b> <b>C10 Using Earth's resources</b></p> <p><i>Themes</i> Treating water, extracting metals &amp; recycling</p> <p><i>Assessment</i> End of topic assessment and Mock exam</p>	<p><b>Topics</b> <b>Biology</b> <b>B7 Ecology</b></p> <p><i>Themes</i> Biodiversity and ecosystems</p> <p><i>Assessment</i> End of topic assessment</p> <p><b>Topics</b> <b>Chemistry</b> <b>Review of modules C1 to C4</b></p> <p><i>Assessment</i> C1 to C4 assessment</p> <p><b>Topics</b> <b>Physics</b> <b>Review of modules P1 to P3</b></p> <p><i>Assessment</i> P1, P2 &amp; P3 assessment</p>	<p><b>Topics</b> <b>Biology</b> <b>Review of modules B1 to B4</b></p> <p><i>Assessment</i> Mock exam</p> <p><b>Topics</b> <b>Chemistry</b> <b>Review of modules C5 to C8</b></p> <p><i>Assessment</i> Mock exam</p> <p><b>Topics</b> <b>Physics</b> <b>Review of modules P4 to P7</b></p> <p><i>Assessment</i> Mock exam</p>	<p><b>Topics</b> <b>Biology</b> <b>Review of modules B5 to B7</b></p> <p><i>Assessment</i> Mock exam</p> <p><b>Topics</b> <b>Chemistry</b> <b>Review of modules C9 &amp; C10</b></p> <p><i>Assessment</i> Mock exam</p> <p><b>Topics</b> <b>Physics</b> <b>Review of all physics modules</b></p> <p><i>Assessment</i> Mock exam</p>	<p><b>Biology</b> - Study Leave/Revision</p> <p><b>Chemistry</b> - Study Leave/Revision</p> <p><b>Physics</b> - Study Leave/Revision</p>

<p><b><u>Physics</u></b> <b>Topics</b> <b>P6 Waves</b></p> <p><i>Themes</i> Properties of waves, reflection and refraction</p> <p><i>Assessment</i> End of topic assessment</p>	<p><b><u>Physics</u></b> <b>P7 Magnetism &amp; electromagnetism</b></p> <p><i>Themes</i> Magnetic fields, the motor effect, EM spectrum and X-rays in medicine</p> <p><i>Assessment</i> End of topic assessment and Mock exam</p>				
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**Exam board AQA - Separate sciences GCSE**

<p><b><u>Topics</u></b> <b>Topics</b> <b>B1 Cell division &amp; B3 Non-communicable diseases</b></p> <p><i>Themes</i> Mitosis, meiosis, stem cells, cancer, smoking &amp; alcohol</p> <p><i>Assessment</i> End of topic assessment</p> <p><b><u>Chemistry</u></b> <b>Topics</b> <b>C8 Chemical analysis &amp; C9 Earth's resources</b></p>	<p><b><u>Topics</u></b> <b>Biology</b> <b>B7 Ecology</b></p> <p><i>Themes</i> Adaptations, interdependence and competition</p> <p><i>Assessment</i> End of topic assessment and Mock exam</p> <p><b><u>Topics</u></b> <b>Chemistry</b> <b>C10 Using Earth's resources</b></p>	<p><b><u>Topics</u></b> <b>Biology</b> <b>B7 Ecology</b></p> <p><i>Themes</i> Biodiversity and ecosystems</p> <p><i>Assessment</i> End of topic assessment</p> <p><b><u>Topics</u></b> <b>Chemistry</b> <b>Review of modules C1 to C4</b></p> <p><i>Assessment</i> C1 to C4 assessment</p>	<p><b><u>Biology</u></b> Revision of B2</p> <p><i>Assessment</i> B2 &amp; B3 Mock exam</p> <p><b><u>Chemistry</u></b> Revision of C2</p> <p><i>Assessment</i> C2 &amp; C3 Mock exam</p> <p><b><u>Physics</u></b> Revision of P2</p> <p><i>Assessment</i> P2 &amp; P3 Mock exam</p>	<p><b><u>Biology</u></b> Revision of B1</p> <p><b><u>Chemistry</u></b> Revision of C1</p> <p><b><u>Physics</u></b> Revision of P1</p>	<p><b><u>Biology</u></b> Study Leave.</p> <p><b><u>Chemistry</u></b> Study Leave.</p> <p><b><u>Physics</u></b> Study Leave.</p>
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<p><u>Themes</u> Chromatography, evolving atmosphere, Greenhouse gases &amp; climate change</p> <p><u>Assessment</u> End of topic assessment</p> <p><u>Physics</u> <u>Topics</u> <b>P6 Waves</b></p> <p><u>Themes</u> Properties of waves, reflection and refraction</p> <p><u>Assessment</u> End of topic assessment</p>	<p><u>Themes</u> Treating water, extracting metals &amp; recycling</p> <p><u>Assessment</u> End of topic assessment and Mock exam</p> <p><u>Topics</u> <u>Physics</u> <b>P7 Magnetism &amp; electromagnetism</b></p> <p><u>Themes</u> Magnetic fields, the motor effect, EM spectrum and X-rays in medicine</p> <p><u>Assessment</u> End of topic assessment and Mock exam</p>	<p><u>Topics</u> <u>Physics</u> <b>Review of modules P1 to P3</b></p> <p><u>Assessment</u> P1, P2 &amp; P3 assessment</p>			
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*SMSC/British Values:*

*Democracy; The rule of Law; Individual liberty; Mutual respect and tolerance of those of different faiths and beliefs.*

*Term 1 - Debating the ethical arguments surrounding cloning and genetic engineering.*

*Term 2 – Haber process and the impact it had on the second world war.*

*Term 5 – CERN and the potential implications for society including the use of fusion for energy production?*

**Enrichment/Extra Curriculum:**

- *National Science Week activities March 2018, Science club and Crest Award.*