

### Science Dept. Curriculum Map

YEAR	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
7 (please note that depending on teacher split, some topics may start slightly earlier or later)	<ul style="list-style-type: none"> <li>Blast off (introduction to Key Stage 3 Science)</li> <li>Start May the force be with you 1 (forces &amp; motion)</li> </ul>	<ul style="list-style-type: none"> <li>Complete May the force be with you 1 (forces &amp; motion)</li> <li>It's Alive 1 (cells, microscopes, the human body, food)</li> </ul>	<ul style="list-style-type: none"> <li>Tumbling down (acids, alkalis &amp; rocks)</li> <li>HSW (Scientific investigation)</li> </ul>	<ul style="list-style-type: none"> <li>Hubble bubble 2 (states of matter, atoms, elements, compounds)</li> </ul>	<ul style="list-style-type: none"> <li>Sparks will fly 1 (energy &amp; fuels)</li> <li>HSW (scientific investigation)</li> </ul>	<ul style="list-style-type: none"> <li>Green fingers 2 (ecology &amp; plant and animal adaptations)</li> </ul>
8 (please note that depending on teacher split, some topics may start slightly earlier or later)	<ul style="list-style-type: none"> <li>May the force be with you 2 (space, gravity, pressure)</li> <li>Circle of life lessons 5-11 (plant reproduction, genetics)</li> <li>Circle of life lessons 1-4 (animal reproduction)</li> </ul>	<ul style="list-style-type: none"> <li>Fatal Reactions 1 (periodic table &amp; chemical reactions)</li> <li>HSW (Scientific Investigation)</li> </ul>	<ul style="list-style-type: none"> <li>Fatal reactions 2 (more chemical reactions, reactivity, polymers)</li> <li>Sparks will fly 2 (light, sound, electromagnetic spectrum)</li> </ul>	<ul style="list-style-type: none"> <li>It's Alive 2: L1-4 (skeleton, muscles, microbes)</li> <li>HSW (scientific investigation)</li> <li>It's Alive 2: L5-10 &amp; AfL (Drugs, lungs, heart)</li> </ul>	<ul style="list-style-type: none"> <li>It's Electrifying (electricity &amp; magnetism)</li> <li>Hubble bubble 1 (solubility, crystallisation, separating mixtures)</li> </ul>	<ul style="list-style-type: none"> <li>HSW (Scientific investigation)</li> <li>Green Fingers 1 (photosynthesis &amp; respiration)</li> </ul>
9 (please note that			<ul style="list-style-type: none"> <li>BY2.1 – Organs and organ systems</li> <li>BY2.2 – Enzymes</li> </ul>	<ul style="list-style-type: none"> <li>BY3.1 – Communicable</li> <li>BY3.2 – Treatment</li> </ul>		

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<p>depending on teacher split and specialism, some topics may start slightly earlier or later) Please note that the early entry group follows a different route)</p>	<ul style="list-style-type: none"> <li>● BY1.1 – Cells &amp; BY1.2 – Movement of molecules</li> <li>● CY1.1 – Atomic structures &amp; CY1.2 Periodic table</li> <li>● PY1.1 – Energy &amp; PY1.2 – Energy sources</li> </ul> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>	<ul style="list-style-type: none"> <li>● CY2.1 – Bonding</li> <li>● PY2.1 – Electricity</li> </ul> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>	<ul style="list-style-type: none"> <li>● CY2.2 – Structures</li> <li>● PY2.2 – Mains Electricity</li> </ul> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>
<p><b>10 Combined Science</b> (please note that depending on teacher split and specialism, some topics may start slightly earlier or later)</p>	<ul style="list-style-type: none"> <li>● BY3.1 – Communicable &amp; BY3.2 – Treatment</li> <li>● CY4.1 – Chemical changes</li> <li>● CY4.2 – Electrolysis</li> <li>● PY3.1 – Particle model &amp; PY4.1 Atomic model and radiation</li> </ul> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>	<ul style="list-style-type: none"> <li>● BY4.1 – Bioenergetics</li> <li>● CY5.1 – Energy changes</li> <li>● CY6.1 – Rates of reaction</li> <li>● PY5.1 (COD) – Forces</li> </ul> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>	<ul style="list-style-type: none"> <li>● BY5.1 – Homeostasis</li> <li>● BY5.2 – Endocrine system</li> <li>● CY7.1 – Crude oil</li> <li>● PY5.2 (COD) – Motion</li> </ul> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>

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<p><b>10 Triple Science</b> (Please note that the early entry group follows a different route)</p>	<p>Biology</p> <p>BY3.2 - Treatment</p> <p>BY4.1 – Biogenetics</p> <p>BY5.1 – Nervous system</p> <hr/> <p>Chemistry</p> <p>CY4.2 – Electrolysis</p> <p>CY5.1 – Energy change</p> <p>CY6.1 – Rate of reaction</p> <hr/> <p>Physics</p> <p>PY3.1 – Particle model</p> <p>PY4.1 – Atomic model &amp; radiation</p> <p>PY4.2 – Uses of radiation</p>	<p>Biology</p> <p>BY5.2 – Endocrine</p> <p>BY5.3 – Homeostasis</p> <hr/> <p>Chemistry</p> <p>CY7.1 – Crude oil</p> <p>CY3.1 – Quant Chemistry</p> <hr/> <p>Physics</p> <p>PY5.1 (BCP)– Forces</p> <p>PY5.2 (BCP)– Motion</p>	<p>Biology</p> <p>BY7.1 – Communities &amp; energy flow</p> <hr/> <p>Chemistry</p> <p>CY7.2 – Organic Chemistry</p> <hr/> <p>Physics</p> <p>PY6.1 – Transverse &amp; longitude waves</p>
<p><b>11 Combined Science</b></p>	<p>Biology</p> <p>BY7.1 Energy Flows</p> <p>BY7.2 – Human impact</p> <p>BY6.1 – Genetics</p> <hr/> <p>Chemistry</p> <p>CY8.1 – Analytical</p> <hr/> <p>Physics</p> <p>PY6.1 - Waves</p> <p>PY6.2 - EMS</p> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>	<p>Biology</p> <p>BY6.2 – Variation &amp; BY6.3 – Changing organisms</p> <hr/> <p>Chemistry</p> <p>CY9.1 – Atmosphere &amp; CY10.1 – Using resources</p> <hr/> <p>Physics</p> <p>PY7.1 – Magnetism</p> <p>Order in term depends on the subject specialisms of the shared teachers for each group</p>	<p>Revision and external exams</p>
<p><b>11 Triple Science</b> (Please</p>	<p>Biology</p>	<p>Biology</p>	<p>Revision and external exams</p>

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<p>note that the early entry group follows a different route)</p>	<table border="1" style="width: 100%;"> <tr><td>BY7.2 – Human impact</td></tr> <tr><td>BY6.1 – Genetics</td></tr> <tr><td>BY6.2 – Variation</td></tr> <tr><td> </td></tr> <tr><td>Chemistry</td></tr> <tr><td>CY8.1 – Analytical</td></tr> <tr><td>CY9.1 – Atmosphere</td></tr> <tr><td>CY10.1 – Using resources</td></tr> <tr><td> </td></tr> <tr><td>Physics</td></tr> <tr><td>PY6.2 - EMS</td></tr> <tr><td>PY7.1 – Magnetism</td></tr> <tr><td>PY7.2 – Magnetism advanced</td></tr> </table>		BY7.2 – Human impact	BY6.1 – Genetics	BY6.2 – Variation		Chemistry	CY8.1 – Analytical	CY9.1 – Atmosphere	CY10.1 – Using resources		Physics	PY6.2 - EMS	PY7.1 – Magnetism	PY7.2 – Magnetism advanced	<table border="1" style="width: 100%;"> <tr><td>BY6.3 – Changing organisms</td></tr> <tr><td> </td></tr> <tr><td>Chemistry</td></tr> <tr><td>CY10.2 – Earth’s resources</td></tr> <tr><td> </td></tr> <tr><td>Physics</td></tr> <tr><td>PY8.1 – Space</td></tr> <tr><td> </td></tr> </table>	BY6.3 – Changing organisms		Chemistry	CY10.2 – Earth’s resources		Physics	PY8.1 – Space		
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<p><b>12 Biology</b> (Please note that some topics may start slightly earlier or later)</p>	<p>Exchange in animals Foundations in Biology</p>	<p>Exchange in animals Cells</p>	<p>Immunology Biochemistry</p>	<p>Ecology Biochemistry</p>	<p>Classification Enzymes Evolution Cell division Excretion Respiration AS Biology external exams</p>																				
<p><b>12 Chemistry</b> (Please note that some topics may start slightly earlier or later)</p>	<p>1 (Development of practical skills in Chemistry) 2.1 Atoms and reactions 3.2 Physical chemistry</p>		<p>4.1 Basic concepts and hydrocarbons 4.2 Alcohols, haloalkanes and analysis 2.2 Electrons, bonding and structure 3.1 The periodic table</p>		<p>Complete last topics Revision AS Chemistry external exam Start A2 content</p>																				
<p><b>12 Physics</b> (Please note that some topics may start</p>	<p>Practical Skills Motion Forces in action Charge &amp; current</p>	<p>Foundations of Physics Work, energy and power</p>	<p>Materials Newtons laws Waves 1 Quantum physics</p>	<p>Electrical circuits</p>	<p>Waves 2 AS Physics external exam</p>																				

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slightly earlier or later)		Energy, power and resistance				
<b>13 Biology</b> (Please note that some topics may start slightly earlier or later)	Responses Homeostasis	Photosynthesis Nerves	Ecology and populations Endocrine system	Biotechnology Genetics	Exam preparation	External A-Level Biology exams
<b>13 Chemistry</b> (Please note that some topics may start slightly earlier or later)	5.1 Rates, equilibrium and pH 6.1: Aromatic compounds, carbonyls and acids	Complete 5.1 5.2: Energy Complete Complete 6.1 6.2: nitrogen compounds, polymers and synthesis	Complete 5.2 5.3: Transition elements Complete 6.2 6.3 Analysis	Complete 5.3 Complete 6.3	Exam preparation	External A-Level Chemistry exams
<b>13 Physics</b> (Please note that some topics may start slightly earlier or later)	Thermal physics Circular motion Oscillations Capacitors Electric fields Electromagnetism	Gravitational fields Astrophysics and cosmology	Capacitors Electric fields Electromagnetism	Nuclear and particle physics Medical imaging	Exam preparation	External A-Level Physics exams