



Year	Term 1		Term 2	Term 3
KS3 Y7	<ul style="list-style-type: none"> <li>Enquiry processes</li> <li>Forces - Speed and Gravity</li> <li>Matter - Particles and Separating mixtures</li> <li>Organisms - Movement and Cells</li> </ul>		<ul style="list-style-type: none"> <li>Electromagnets - Electrical circuits</li> <li>Reactions - Acids and Alkalis, and Metals and Non-metals</li> <li>Ecosystems - Interdependence and Plant reproduction</li> </ul>	<ul style="list-style-type: none"> <li>Energy - Energy costs and transfers</li> <li>Earth - Earth structure and the Universe</li> <li>Genes - Variation and Human reproduction</li> <li>Waves - Sound and Light</li> </ul>
	<ul style="list-style-type: none"> <li>Forces - Contact forces and Pressure</li> <li>Matter - Elements and the Periodic table</li> <li>Organisms - Breathing and Digestion</li> </ul>		<ul style="list-style-type: none"> <li>Electromagnets - Magnetism</li> <li>Reactions - Types of reaction and Chemical energy</li> <li>Ecosystems - Photosynthesis and Respiration</li> </ul>	<ul style="list-style-type: none"> <li>Energy - Work, and Heating and Cooling</li> <li>Earth - Climate and Earth resources</li> <li>Genes - Variation and Human reproduction</li> <li>Waves - Wave effects</li> </ul>
KS4 Y9	Biology:	B1: Cell structure and transport B2: Cell division	B3: Organisation and the digestive system B4: Organising animals and plants	B5: Communicable and diseases B6: Preventing and treating disease B7: Non-communicable diseases
	Chemistry:	C1 Atomic Structure C2 The Periodic Table	C3 Structure and Bonding C7 Energy Changes	C8 Rates and Equilibrium C13 The Earth's Atmosphere
	Physics	P1 Conservation and Dissipation of Energy	P2 Energy Transfer by Heating P4 Electric Circuits	P3 Energy Resources# P5 Electricity in the Home
KS4 Y10	Biology:	B8: Photosynthesis B9: Respiration B10: The human nervous system	B11: Hormonal coordination *B12 : Homeostasis in action B13: Reproduction	B14: Variation and evolution B15: Genetics and evolution
	Chemistry:	C5 Chemical Changes C6 Electrolysis	C9 Crude Oil and Fuels *C10 Organic Reactions*	*C11 Polymers* C12 Chemical Analysis
	Physics	P5 Electricity in the home P6 Molecules and Matter	P7 Radioactivity P8 Forces in Balance	P9 Motion P10 Force and Motion *P11 Force and Pressure*
KS4 Y11	Biology:	B16: Adaptations, interdependence and competition B17: Organising an ecosystem	B18: Biodiversity and ecosystems Revision	Revision
	Chemistry:	C14 The Earth's Resources *C15 Using Our Resources*	C4 Chemical Calculations Revision	Revision

	Physics	P6 Molecules and Matter P7 Radioactivity P8 Forces in Balance P9 Motion	P9 Motion P10 Force and Motion *P11 Force and Pressure* *P12 Light*	Revision P15 Electromagnetism *P16 Space*
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**Topics denoted with “\*” are only learnt by students sitting the Triple Science course**

*\*Please state if KS4 starts in Y9. In any case, Y9 is a bridging year between the key stages and the PoS must demonstrate a step change in challenge*

\* Fieldwork visit planned within this topic

KS5 Y12	Biology:	Section 1: Biological molecules Section 2: Cells	Section 3: Organisms Exchange substances with their environment Section 4: Genetic information, variation and relationships between organisms,	Section 5: Energy transfers between organisms (photosynthesis) Section 7: Genetics, populations, evolution and ecosystems (populations in ecosystems)
	Chemistry:	Year 12 Lead in Programme Physical - Atomic structure, Amount of Substance, Bonding, Energetics, Kinetics	Physical - Equilibria, Oxidation and Reduction Organic - Introduction to Organic Chemistry, Alkanes Inorganic - Periodicity, Group 2	Organic - Alkenes, Alcohols, Organic analysis Inorganic - Group 7
	Physics	Year 12 Lead-in Programme 1 Matter and Radiation 2 Quarks and Leptons 4 Waves 5 Optics	3 Quantum Phenomena 6 Forces and Equilibrium 7 On the Move 12 Electric Current 13 Dc Circuits	8 Newton's Laws of Motion 9 Force and Momentum 10 Work, Energy and Power 11 Materials 17 Motion in a Circle 19 Thermal Physics
KS5 Y13	Biology:	Section 5: Energy transfers between organisms (Respiration, Energy and Ecosystems) Section 7: Genetics, populations, evolution and ecosystems (Inherited change, Populations and evolution)	Section 6: Organisms respond to changes in their environments Section 8: Control of Gene Expression	Section 6: Organisms respond to changes in their environments Section 8: Control of Gene Expression
	Chemistry:	Physical - Thermodynamic, Kinetics, Equilibria constant Organic - Nomenclature and isomerism, Compounds containing the carbonyl group, Aromatic compounds	Physical - Electrode potentials and electrochemical cells, Acids, bases and buffers Organic - Amines, Polymerisation, Amino acids, proteins and DNA, Organic synthesis and analysis	Inorganic - Periodicity, The transition metals, Reactions of inorganic compounds in aqueous solutions Organic - Structure determination, Chromatography
	Physics	19 Thermal Physics 20 Gases 21 Gravitational Fields 18 Simple Harmonic Motion 26 Radioactivity	27 Nuclear Energy 22 Electric Fields 24 Magnetic Fields 25 Electromagnetic Induction 23 Capacitors	Option Module - Astrophysics