

KS3/GCSE Year 9 Science Curriculum Teaching Sequence			
	Term 1	Term 2	Term 3
Biology KS3/GCSE (Separate Sciences)	<u>B2.2: Introduction to Bioenergetics (KS3)</u> L1 Introduction to Photosynthesis & Respiration L2 Lifestyle Factors & Risks L3 Respiration & Exercise L4 Muscle Fatigue L5 Photosynthesis & Investigation L6 Plant Adaptations L7 Non-Photosynthetic Plants <u>B1a Cell Structure</u> L1 Eukaryotic L2 Prokaryotic Cells L3 Microscopy and Calculations L4 Microscopy RP L5 Stem Cells L6 Specialised Cells	<u>B1b Cell Transport</u> L1 Diffusion L2 Active Transport L3 Osmosis L4 Osmosis RP L5 Exchange Surfaces L6 Alveoli, Root Hair Cells, Villi	<u>B1c Cell Division Cell</u> L1 Differentiation, Specialisation + levels of organisation L2 Chromosomes L3 Cell Cycle & Mitosis <i>L4 Binary Fission</i> <i>L5 Culturing Microorganisms</i> <i>L6 Culturing Microorganisms</i> <u>B2a Health & Disease</u> L1 Risk Factors of Non-Communicable Diseases L2 Development of Tumours L3 Coronary Heart Disease L4 Data Analysis
Chemistry KS3/GCSE (Separate Sciences)	<u>C1a Atomic Structure</u> L1 Atoms L2 Separating mixtures 1 L3 separating mixtures 2 L4 Develop atomic models L5 Subatomic particles L6 Electron configuration	<u>C1b The Periodic Table</u> L7 The Periodic table L8 Metals, nonmetals and Noble gases L9 Group 1 L10 Group 7 L11 Displacement reactions <i>L12 Transition metals</i>	<u>C3a Quantitative Chemistry</u> L1 Atom conservation + Balancing L2 Relative atomic mass L3 Change in mass L5 Uncertainty L4 Concentration <u>C5a Energy changes</u> L1 Energy transfer L2 Energy changes required practical L3 Energy profiles L4 Bond energies (H)
Physics KS3/GCSE	<u>P3.2: Exploring Electricity</u> L1 Review of Circuits L2 Potential Difference L3 Building a Fruit Battery L4 Potential Difference in Series & Parallel L5 Resistance L6 Ohm's Law L7 Thermistors & LDRs L8 Effects of Static Electricity L9 Explaining Static Electricity L10 Electrical Fields <u>P2.3: Light</u> L1 Wave Properties L2 Waves at Boundaries L3 Reflection L4 Investigating Reflection L5 Refraction L6 Investigating Refraction L7 Colour L8 Lenses & The Eye L9 Cameras & The Eye	<u>P1a: Energy Stores & Transfers</u> L1. Energy Stores & Transfers L2 Gravitational Potential Energy L3 Kinetic Energy L4 Elastic Potential Energy L5 Conservation of Energy L6 Energy & Power L7 Efficiency L8 Calculations	<u>P1b: Thermal Energy & Energy Resources</u> L1 Conduction L2 Infrared Radiation L3 Thermal Insulation L4 Investigating Thermal Insulation L5 Specific Heat Capacity L6 Investigating Specific Heat Capacity L7 Non-Renewable Energy L8 Energy from Wind & Water L9 Energy from the Sun & Earth L10 Energy Demands & Issues <u>P3: Particle Model of Motion</u> L1 States of Matter L2 Density L3 Density Required Practical L4 Changing State L5 Internal Energy L6 Latent Heat L7 Gas Motion L8 Pressure & Temperature L9 Pressure & Volume

How Science works	<u>Required practicals</u> Microscopy	<u>Required practicals</u> Osmosis	<u>Required practicals</u> Microbiology Specific heat capacity Radiation and absorption Insulation Density Temperature
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