

OsKings' KS4 - 2 Year Science Long Term Plan

Year 1	Autumn Term	Spring Term	Summer Term
First half focus	<p>ELC Component 2 Environment, Inheritance and Evolution.</p> <p>GCSE Biology topics related to ecology including required Practicals.</p> <p>Photosynthesis, adaptation, feeding relationships, nutrient cycles, biotic and abiotic environmental factors, pollution, evolution, sexual and asexual reproduction, genes and genetic engineering.</p>	<p>ELC Component 4 coursework investigation</p> <p>ELC Component 6 Electricity, Magnetism and Waves.</p> <p>GCSE Physics electricity, magnetism and waves topics including required Practicals.</p> <p>Circuits, domestic electricity, electricity generation, magnets, electromagnets, waves and nuclear radiation.</p>	<p>Complete any outstanding Entry Level coursework or assessments.</p> <p>Year 11 GCSE students – revision and exam preparation.</p> <p>Year 11 ELC students – Using and applying Science.</p> <p>Year 10 students – ELC Component 2 coursework – plant survey.</p>
Assessment	ELC Component 2 assessment	ELC Component 4 Coursework GCSE Mock Exams	ELC Component 2 coursework.
Second half focus	<p>ELC Component 4 Chemistry in Our World.</p> <p>GCSE Chemistry topics related to chemistry in our world including required Practicals.</p> <p>Reactions between metals and acid, origins and development of the atmosphere, air pollution and the greenhouse effect and water treatment</p>	<p>ELC Component 6 coursework</p> <p>GCSE required Physics Practicals.</p>	<p>Year 11 GCSE students – Revision and Exam preparation and formal examinations.</p> <p>Year 11 ELC students – Famous scientists research project.</p> <p>Year 10 students – Consolidation, revision and exam techniques.</p>
Assessment	ELC Component 4 assessment	ELC Component 6 Coursework	GCSE Examinations

Year 2	Autumn Term	Spring Term	Summer Term
First half focus	<p>ELC Component 1 Human Biology</p> <p>GCSE Human Biology topics and required Practicals.</p> <p>Cells, organs and organ systems, nutrition and digestion, respiration, circulatory system, disease, the immune system, medicine and drugs and reflexes and the central nervous system.</p>	<p>ELC Component 3 coursework.</p> <p>GCSE required Chemistry Practicals</p>	<p>Complete any outstanding Entry Level coursework or assessments.</p> <p>Year 11 ELC students – Using and applying Science.</p> <p>Year 11 GCSE revision and exam preparation.</p> <p>Year 10 students – ELC Component 2 coursework – plant survey.</p>
Assessment	ELC Component 1 Assessment	ELC Component 3 Coursework GCSE Mock Exams	ELC Component 2 coursework (year 10s)
Second half focus	<p>ELC Component 1 Coursework investigation</p> <p>ELC Component 3 Atoms, Elements, Mixtures and compounds.</p> <p>GCSE Chemistry topics relating to atoms, elements, mixtures and compounds including required Practicals.</p>	<p>ELC Component 5 Energy, Forces and Structure of Matter.</p> <p>GCSE Physics topics related to energy forces and atomic structure.</p> <p>ELC Component 5 Coursework</p> <p>The nine types of energy, identifying forces, speed, stopping distances, reaction times and nuclear energy.</p>	<p>Year 11 students – revision and exam preparation.</p> <p>Year 11 ELC students – Famous scientists research project.</p> <p>Year 10 students – Consolidation, revision and exam techniques</p>
Assessment	ELC Component 1 coursework ELC Component 3 assessment	ELC Component 5 Assessment ELC Component 5 Coursework	GCSE Examinations