

## Southern International School Science Curriculum: Journey on a page 2023/2024

<p><b>Year 7: KS3</b></p> <ul style="list-style-type: none"> <li>● <i>Autumn 1 – Physics: Forces, Energy, GPE and KE.</i></li> <li>● <i>Autumn 2 – The Earth and beyond – night sky, solar system, Moon, the Universe. Chemistry: States of Matter.</i></li> <li>● <i>Spring 1 – Materials, elements, metals, acids and alkalis, pH. Structure of the earth, rocks and soil.</i></li> <li>● <i>Spring 2 - Biology: Plants, Humans.</i></li> <li>● <i>Cells and tissues, living organisms.</i></li> <li>● <i>Summer 1 – The environment, habitats, food chains, classification.</i></li> </ul>	<p><b>Year 8: KS3</b></p> <ul style="list-style-type: none"> <li>● <i>Autumn 1 – Physics: Speed, distance, acceleration, sound, light, colour.</i></li> <li>● <i>Autumn 2 – Reflection, refraction, magnets. Chemistry: States of matter, density, pressure, atoms and elements.</i></li> <li>● <i>Spring 1 –chemical reactions, word equations. Biology: Plants, diet, digestion.</i></li> <li>● <i>Spring 2 – Circulation, respiration, reproduction</i></li> <li>● <i>Summer 1 – Drugs and disease.</i></li> </ul>	<p><b>Year 9: KS3</b></p> <ul style="list-style-type: none"> <li>● <i>Autumn 1 – Physics: Pressure, density, levers, electricity.</i></li> <li>● <i>Autumn 2 – Energy, thermal energy transfer, renewable energy. Chemistry: Atomic structure, elements, periodic trends.</i></li> <li>● <i>Spring 1 – Energy changes, reactivity, salts, rates of reaction.</i></li> <li>● <i>Spring 2 – Biology: Photosynthesis, flowers, survival, food webs, extinction.</i></li> <li>● <i>Summer 1 – Pollution, variation, evolution.</i></li> </ul>
<p><b>Year 10: KS4</b></p> <ul style="list-style-type: none"> <li>● <i>Autumn 1 – Physics Revision, Yrs. 7,8 and 9, plus the equations of motion, electricity formulas.</i></li> <li>● <i>Autumn 2 – Physics past paper questions. Chemistry: Revision Yrs. 7,8 and 9.</i></li> <li>● <i>Spring 1 – Chemical tests, chemical calculations, symbol equations, chemistry in industry, organic Chemistry.</i></li> <li>● <i>Spring 2 – Chemistry past paper questions. Biology: Revision Yrs. 7,8 and 9.</i></li> <li>● <i>Summer 1 - Genetics, hormones, homeostasis, Biology past paper questions.</i></li> </ul>	<p><b>Year 11/12: KS4</b></p> <ul style="list-style-type: none"> <li>● <i>Autumn 1 – Co-ordinated Science past papers, practice and review</i></li> <li>● <i>Autumn 2 - Co-ordinated Science past papers, practice and review</i></li> <li>● <i>Spring 1 - Co-ordinated Science past papers, practice and review</i></li> <li>● <i>Spring 2 - Co-ordinated Science past papers, practice and review</i></li> <li>● <i>Summer 1 – IGCSE’s</i></li> </ul>	
<p><b>Curriculum Intent:</b></p> <p><i>The Cambridge Lower Secondary Science curriculum is presented in four content areas: Scientific enquiry, Biology, Chemistry and Physics. Scientific enquiry is about considering ideas, evaluating evidence, planning investigative work and recording and analysing data. The Scientific enquiry objectives underpin Biology, Chemistry and Physics, which are focused on developing confidence and interest in scientific knowledge. Environmental awareness and some history of Science are also incorporated.</i></p> <p><b>SIH Science Students will:</b></p> <ul style="list-style-type: none"> <li>● <i>Be able to talk about the importance of questions, evidence and explanations</i></li> <li>● <i>Make predictions and review them against evidence</i></li> <li>● <i>Make predictions referring to previous scientific knowledge and understanding</i></li> <li>● <i>Identify appropriate evidence to collect and suitable methods of collection</i></li> <li>● <i>Choose appropriate apparatus and use it correctly</i></li> <li>● <i>Obtain and present evidence, make careful observations including measurements, present results in the form of tables, bar charts and line graphs</i></li> </ul>		