

Y5/6 Science Cycle A

Scientific Enquiry	<p>SE1: Use their science experiences to explore ideas and raise different kinds of questions.</p> <p>SE2: Talk about how scientific ideas have developed over time.</p> <p>SE3: Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions.</p> <p>SE4: Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why.</p> <p>SE5: Use and develop keys and other information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural environment.</p> <p>SE6: Recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact.</p> <p>SE7: Make their own decisions about what observations to make, what measurements to use and how long to make them for.</p> <p>SE8: Look for different casual relationships in their data and identify evidence that refutes or supports their ideas.</p> <p>SE9: Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately. Take repeat measurements where appropriate.</p> <p>SE10: Decide how to record data and results of increasing complexity form a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>SE11: Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>SE12: Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas, use oral and written forms such as displays and other presentations to report conclusions, casual relationships and explanations of degree of trust in results.</p> <p>SE13: Use their results to make predictions and identify when further observations, comparative and fair tests might be needed.</p>
Physics	<p>Forces</p> <p>P1: Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>P2: Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.</p> <p>P3: Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>Electricity</p> <p>P4: Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>P5: Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>P6: Use recognised symbols when representing a simple circuit in a diagram.</p>

Chemistry	<p>Properties and changes of materials</p> <p>C1: Compare and group together everyday materials on the basis of their properties, including their solubility, conductivity - thermal,</p> <p>C2: Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>C3: Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>C4: Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p>C5: Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>C6: Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>
Biology	<p>Living things and their Habitats</p> <p>B1: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>B2: Describe the life process of reproduction in some plants and animals.</p> <p>Animals Including Humans</p> <p>B3: Describe the changes as humans develop to old age.</p> <p>(teach these two biology units together if possible)</p> <p>B4: Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>B5: Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>B6: Describe the ways in which nutrients and water are transported within animals, including humans.</p>