

## Y5/6 Science Cycle B

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><b>Light</b></p> <p>Recognise that light appears to travel in straight lines</p> <p>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> <p><b>Earth and space</b></p> <p>(explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object)</p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>Describe the movement of the Moon relative to the Earth</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p>

Chemistry	<p><b>Properties of materials</b>  Compare and group together everyday materials on the basis of their properties, including their hardness, transparency, conductivity electrical, and response to magnets.</p>
Biology	<p><b>Living Things and their habitats</b>  Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.  Give reasons for classifying plants and animals based on specific characteristics.</p> <p><b>Evolution and Inheritance</b>  Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.  Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.  Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>