

SCIENCE HIGHGATE PRIMARY SCOPE & SEQUENCE

| | Pre-primary | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|---|--|---|---|--|---|---|--|
| Science understanding | | | | | | | |
| Term 1: Biological sciences | Living things have basic needs, including food and water | Living things have a variety of external features Living things live in different places where their needs are met | Living things grow, change and have offspring similar to themselves | Living things can be grouped on the basis of observable features and can be distinguished from non-living things | Living things have life cycles Living things depend on each other and the environment to survive | Living things have structural features and adaptations that help them to survive in their environment | The growth and survival of living things are affected by physical conditions of their environment |
| Term 2: Chemical sciences | Objects are made of materials that have observable properties | Everyday materials can be physically changed in a variety of ways | Different materials can be combined for a particular purpose | A change of state between solid and liquid can be caused by adding or removing heat | Natural and processed materials have a range of physical properties that can influence their use | Solids, liquids and gases have different observable properties and behave in different ways | Changes to materials can be reversible or irreversible |
| Term 3: Earth and space sciences | Daily and seasonal changes in our environment affect everyday life | Observable changes occur in the sky and landscape | Earth's resources are used in a variety of ways | Earth's rotation on its axis causes regular changes, including night and day | Earth's surface changes over time as a result of natural processes and human activity | The Earth is part of a system of planets orbiting around a star (the sun) | Sudden geological changes and extreme weather events can affect Earth's surface |
| Term 4: Physical sciences | The way objects move depends on a variety of factors, including their size and shape | Light and sound are produced by a range of sources and can be sensed | A push or a pull affects how an object moves or changes shape | Heat can be produced in many ways and can move from one object to another | Forces can be exerted by one object on another through direct contact or from a distance | Light from a source forms shadows and can be absorbed, reflected and refracted | Electrical energy can be transferred and transformed in electrical circuits and can be generated from a range of sources |

**The Inquiry Skills of Planning, Conducting, Processing and Analysing data and Evaluating are taught across all year levels with assessments in investigations carried out during Years 3 to 6.

SCIENCE – Scope and sequence P–6

| Science inquiry skills | | | | |
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| Questioning and predicting | Pose and respond to questions about familiar objects and events | Pose and respond to questions, and make predictions about familiar objects and events | With guidance, identify questions in familiar contexts that can be investigated scientifically and make predictions based on prior knowledge | With guidance, pose clarifying questions and make predictions about scientific investigations |
| Planning and conducting | Participate in guided investigations and make observations using the senses | Participate in guided investigations to explore and answer questions Use informal measurements to collect and record observations, using digital technologies as appropriate | With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment Consider the elements of fair tests and use formal measurements and digital technologies as appropriate, to make and record observations accurately | Identify, plan and apply the elements of scientific investigations to answer questions and solve problems using equipment and materials safely and identifying potential risks Decide variables to be changed and measured in fair tests, and observe measure and record data with accuracy using digital technologies as appropriate |
| Processing and analysing data and information | Engage in discussions about observations and represent ideas | Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions | Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends Compare results with predictions, suggesting possible reasons for findings | Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate Compare data with predictions and use as evidence in developing explanations |
| Evaluating | | Compare observations with those of others | Reflect on investigations, including whether a test was fair or not | Reflect on and suggest improvements to scientific investigations |
| Communicating | Share observations and ideas | Represent and communicate observations and ideas in a variety of ways | Represent and communicate observations, ideas and findings using formal and informal representations | Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts |