

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				
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