

# Stage 1 Science



## STAGE STATEMENT

By the end of Stage 1 students show an interest in science and technology by responding to questions, perceived needs and wants. They describe situations where they and other people use science and technology in their daily lives. They investigate the variety of ways in which the Earth's resources are used and suggest ways that science and technology can help people care for the environment and shape sustainable futures. Through activities structured by the teacher, students continue to learn about and engage in applying the processes of Working Scientifically and Working Technologically. Students show curiosity about the Natural Environment and the Made Environment, while purposeful play becomes more focused on exploring and making observations using their senses. When engaging in the processes of Working Scientifically and Working Technologically, students safely and carefully manipulate available tools, materials and equipment. They use a range of methods to represent information and to communicate their observations and ideas to others, with the assistance of digital technologies where appropriate.

When Working Scientifically students identify questions, make predictions and investigate everyday phenomena to explore and answer their questions. They participate in a range of types of investigations, including surveys, testing ideas and accessing information sources. Students follow instructions to collect, record and compare their observations using informal measurements as appropriate.

When Working Technologically students use a structured design process to produce solutions in response to identified needs and wants of users/audiences. They generate and develop design ideas using research and communicate their ideas using plans, drawings and models. Students use a sequence of simple steps to produce these solutions for built environments, information and products. They give simple explanations about what they did to design and produce the solution and how it meets the needs of the user/audience. Students describe the features of and ways in which living things grow and change, and how living things depend on places in their environment to meet their needs. They describe some sources of light and sound that they sense in their daily lives. They also describe changes in the sky and landscape, as well as the effects of pushes and pulls on objects. Students identify ways in which materials can be physically changed and combined, and that properties of everyday materials can be related to their uses for particular purposes. They use their understanding of the Made Environment to describe a range of manufactured products, built environments and information sources and technologies, and how their different purposes influence their design.

## OUTCOMES

Outcome		
Values and Attitudes	ST1-1VA	shows interest in and enthusiasm for science and technology, responding to their curiosity, questions and perceived needs, wants and opportunities
	ST1-2VA	demonstrates a willingness to engage responsibly with local, national and global issues relevant to their lives, and to shaping sustainable futures
	ST1-3VA	develops informed attitudes about the current and future use and influence of science and technology based on reason
Skills	ST1-4WS	investigates questions and predictions by collecting and recording data, sharing and reflecting on their experiences and comparing what they and others know
	ST1-5WT	uses a structured design process, everyday tools, materials, equipment and techniques to produce solutions that respond to identified needs and wants
Knowledge and Understanding	ST1-6PW	describes some sources of light and sound that they sense in their daily lives
	ST1-7PW	describes effects of pushes and pulls on objects they encounter
	ST1-8ES	describes some observable changes that occur in the sky and landscape
	ST1-9ES	identifies ways that people use science in their daily lives to care for the environment and the Earth's resources
	ST1-10LW	describes external features, changes in and growth of living things
	ST1-11LW	describes ways that different places in the environment provide for the needs of living things
	ST1-12MW	relates the properties of common materials to their use for particular purposes
	ST1-13MW	relates the properties of common materials to their use for particular purposes
	ST1-14BE	describes a range of places and spaces in the local environment and how their purposes influence their design
	ST1-15I	describes a range of familiar information sources and technologies and how their purposes influence their design
	ST1-16P	describes a range of manufactured products in the local environment and how their different purposes influence their design