OUTCOMES

VALUES AND ATTITUDES

Values and attitudes outcomes have been developed for the stages of learning.

A student:

STe-1VA, ST1-1VA, ST2-1VA, ST3-1VA

shows interest in and enthusiasm for science and technology, responding to their curiosity, questions and perceived needs, wants and opportunities

STe-2VA, ST1-2VA, ST2-2VA, ST3-2VA

demonstrates a willingness to engage responsibly with local, national and global issues relevant to their lives, and to shaping sustainable futures

STe-3VA, ST1-3VA, ST2-3VA, ST3-3VA

develops informed attitudes about the current and future use and influence of science and technology based on reason

<u>SKILLS</u>

Early Stage 1 Working Scientifically outcome A student: STe-4WS explores their immediate surroundings by questioning, observing using their senses and communicating to share their observations and ideas	Stage 1 Working Scientifically outcome A student: ST1-4WS Investigates questions and predictions by collecting and recording data, sharing and reflecting on their experiences and comparing what they and others know	Stage 2 Working Scientifically outcome A student: ST2-4WS investigates their questions and predictions by analysing collected data, suggesting explanations for their findings, and communicating and reflecting on the processes undertaken	Stage 3 Working Scientifically outcome A student: ST3-4WS investigates by posing questions, including testable questions, making predictions and gathering data to draw evidence based conclusions and develop explanations
Early Stage 1 Working Technologically outcome A student: STe-SWT uses a simple design process to produce solutions with identified purposes	Stage 1 Working Technologically outcome A student: ST1-5WT uses a structured design process, everyday tools, materials, equipment and techniques to produce solutions that respond to identified needs and wants	Stage 2 Working Technologically outcome A student: ST2-SWT applies a design process and uses a range of tools, equipment, materials and techniques to produce solutions that address specific design criteria	Stage 3 Working Technologically outcome A student: ST3-SWT plans and implements a design process, selecting a range of tools, equipment, materials and techniques to produce solutions that address the design criteria and identified constraints

KNOWLEDGE AND UNDERSTANDING

Early Stage 1 outcomes A student:	Stage 1 outcomes A student:	Stage 2 outcomes A student:	Stage 3 outcomes A student:
STe-6NE identifies that the way objects move depends on a variety of factors	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	ST2-6PW identifies ways heat is produced and that heat moves from one object to another ST2-7PW describes everyday interactions between objects that result from contact and noncontact forces	ST3-6PW describes how scientific understanding about the sources, transfer and transformation of electricity is related to making decisions about its use ST3-7PW uses scientific knowledge about the transfer of light to solve problems that directly affect people's lives
STe-7NE observes, using their senses, how daily and seasonal changes in the environment affect them and other living things	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	ST2-8ES describes some observable changes over time on the Earth's surface that result from natural processes and human activity ST2-9ES describes how relationships between the sun and the Earth cause regular changes	ST3-8ES describes how discoveries by people from different cultures and times have contributed to advancing scientific understanding of the solar system ST3-9ES explains rapid change at the Earth's surface caused by natural events, using evidence provided by advances in technology and scientific understanding
STe-8NE identifies the basic needs of living things	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	ST2-10LW describes that living things have life cycles, can be distinguished from non-living things and grouped, based on their observable features ST2-11LW describes ways that science knowledge helps people understand the effect of their actions on the environment and on the survival of living things	ST3-10LW describes how structural features and other adaptations of living things help them to survive in their environment ST3-11LW describes some physical conditions of the environment and how these affect the growth and survival of living things

KNOWLEDGE AND UNDERSTANDING CONTINUED

Early Stage 1 outcomes A student:	Stage 1 outcomes A student:	Stage 2 outcomes A student:	Stage 3 outcomes A student:
STe-9ME identifies that objects are made of materials that have observable properties	ST1-12MW identifies ways that everyday materials can be physically changed and combined for a particular purpose ST1-13MW relates the properties of common materials to their use for particular purposes	ST2-12MW identifies that adding or removing heat causes a change of state between solids and liquids ST2-13MW identifies the physical properties of natural and processed materials, and how these properties influence their use	ST3-12MW identifies the observable properties of solids, liquids and gases, and that changes made to materials are reversible or irreversible ST3-13MW describes how the properties of materials determine their use for specific purposes
STe-10ME recognises how familiar products, places and spaces are made to suit their purpose	ST1-14BE describes a range of places and spaces in the local environment and how their purposes influence their design	ST2-14BE describes how people interact within built environments and the factors considered in their design and construction	ST3-14BE describes systems in built environments and how social and environmental factors influence their design
	ST1-15I describes a range of familiar information sources and technologies and how their purposes influence their design	ST2-15I describes ways that information solutions are designed and produced, and factors to consider when people use and interact with information sources and technologies	ST3-15I describes how social influences impact on the design and use of information and communication systems
	ST1-16P describes a range of manufactured products in the local environment and how their different purposes influence their design	ST2-16P describes how products are designed and produced, and the ways people use them	ST3-16P describes systems used to produce or manufacture products, and the social and environmental influences on product design