Holloways Beach Environmental Education Centre – Beachcombing

"Where education comes alive"

Holloways Beach EEC upholds the focus of **"Every Student Succeeding"** by providing students with the opportunity to engage with content identified from the Australian Curriculum in Science, General Capabilities and Cross Curriculum Priorities. The activities highlight a range of year level standards and descriptions that enables the offered curriculum to be differentiated according to student need.

EVERY STUDENT SUCCEEDING: Every student succeeding is the shared vision of Queensland state schools. This strategy underpins regional and school planning to ensure every student receives the support needed to belong to the school community, engage purposefully in learning and experience academic success.

AUSTRALIAN CURRICULUM: Students have the opportunity to engage with Achievement Standards and Content Descriptions identified from the Australian Curriculum in Science, General Capabilities and Cross Curriculum Priorities
NB: Schools need to ensure that the Holloways Beach EEC is aware of the differentiation requirements of students who attend.

Year 5	ACHIEVEMENT STANDARD
	By the end of Year 5, students classify substances according to their observable properties and behaviours. They explain everyday phenomena associated with the transfer of light. They describe the key features of our solar system. They analyse how the form of living things enables them to function in their environments. Students discuss how scientific developments have affected people's lives, help us solve problems and how science knowledge develops from many people's contributions.
	Students follow instructions to pose questions for investigation and predict the effect of changing variables when planning an investigation. They use equipment in ways that are safe and improve the accuracy of their observations. Students construct tables and graphs to organise data and identify patterns in the data. They compare patterns in their data with predictions when suggesting explanations. They describe ways to improve the fairness of their investigations, and communicate their ideas and findings using multimodal text
	CONTENT DESCRIPTIONS
Science Understanding:
Biological Sciences:
• Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)
Science as Human Endeavour:
• Scientific knowledge is used to inform personal and community decisions(ACSHE083)
• People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121)
Science Skills:
Questioning and predicting
• With guidance, pose clarifying questions and make predictions about scientific investigations (ACSIS231)
Planning and conducting
• Identify, plan and apply the elements of scientific investigations to answer questions and solve problems using equipment and materials safely and identifying potential risks (ACSIS086)
• Decide variables to be changed and measured in fair tests, and observe measure and record data with accuracy using digital technologies as appropriate (ACSIS087)

	Processing and analysing data and information • 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 (ACSIS090). *Evaluating* • Reflect on and suggest improvements to scientific investigations (ACSIS091) *Communicating* • Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts (ACSIS093)
	General Capabilities: *Literacy, Numeracy, Personal & Social Capability.* *Critical & Creative Thinking,* • Inquiring, identifying and exploring and organising information and ideas. • Generating ideas, possibilities and actions. • Reflecting on thinking and processes. • Analysing, synthesising and evaluating reasoning and procedures.
	Cross Curricular Priorities: *Sustainability*
Year 6	ACHIEVEMENT STANDARD By the end of Year 6, students compare and classify different types of observable changes to materials. They analyse requirements for the transfer of electricity and describe how energy can be transformed from one form to another when generating electricity. They explain how natural events cause rapid change to Earth's surface. They describe and predict the effect of environmental changes on individual living things. Students explain how scientific knowledge helps us to solve problems and inform decisions and identify historical and cultural contributions. Students follow procedures to develop investigable questions and design investigations into simple cause-and-effect relationships. They identify variables to be changed and measured and describe potential safety risks when planning methods. They collect, organise and interpret their data, identifying where improvements to their methods or research could improve the data. They describe and analyse relationships in data using appropriate representations and construct multimodal texts to communicate ideas, methods and findings.
	CONTENT DESCRIPTIONS Science Understanding: *Biological Sciences*: • **The growth and survival of living things are affected by physical conditions of their Environment (ACSSU094)** Science as Human Endeavour: • **. Scientific knowledge is used to inform personal and community decisions(ACSHE100)** Science Skills: *Questioning and predicting* • With guidance, pose clarifying questions and make predictions about scientific investigations (ACSIS232) *Planning and conducting* • Identify, plan and apply the elements of scientific investigations to answer questions and solve problems using equipment and materials safely and identifying potential risks (ACSIS103). • Decide variables to be changed and measured in fair tests, and observe measure and record data with accuracy using digital technologies as appropriate (ACSIS104).

	Processing and analysing data and information
	• 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 (ACSIS107)
	• Compare data with predictions and use as evidence in developing explanations (ACSIS221)
	Evaluating
	• Reflect on and suggest improvements to scientific investigations (ACSIS108)
	Communicating
	• Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts (ACSIS110)
	•
	General Capabilities: *Literacy, Numeracy, Personal & Social Capability*
	Critical & Creative Thinking,
	• Inquiring, identifying and exploring and organising information and ideas.
	• Generating ideas, possibilities and actions.
	• Reflecting on thinking and processes.
	Analysing, synthesising and evaluating reasoning and procedures.
	Cross Curricular Priorities: *Sustainability*
Year 7	ACHIEVEMENT STANDARD
	By the end of Year 7, students describe techniques to separate pure substances from mixtures. They represent and predict the **effects of unbalanced forces, including Earth's gravity, on motion. They** explain how the relative positions of Earth, the sun and moon affect phenomena on Earth. They analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems. They predict the effect of human and environmental changes on interactions between organisms and classify and organise diverse organisms based on observable differences. Students describe situations where scientific knowledge from different science disciplines and diverse cultures has been used to solve a real-world problem. They explain possible implications of the solution for different groups in society.
	Students identify questions that can be investigated scientifically. They plan fair experimental methods, identifying variables to be changed and measured. They select equipment that improves fairness and accuracy and describe how they considered safety. Students draw on evidence to support their conclusions. They summarise data from different sources, describe trends and refer to the quality of their data when suggesting improvements to their methods. They communicate their ideas, methods and findings using scientific language and appropriate representations.
	CONTENT DESCRIPTIONS
	Science Understanding:
	Biological Sciences:
	• Classification helps organize the diverse group of organisms (ACSSU111)
	Science as Human Endeavour:
	• . People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121)
	Science Skills
	Questioning and predicting
	• Identify questions and problems that can be investigated scientifically and make predictions based on scientific knowledge (ACSIS124)
	Planning and conducting

	• Collaboratively and individually plan and conduct a range of investigation types, including fieldwork and experiments, ensuring safety and ethical guidelines are followed (ACSIS125) • Measure and control variables, select equipment appropriate to the task and collect data with accuracy (ACSIS126) *Processing and analysing data and information* • Construct and use a range of representations, including graphs, keys and models to represent and analyse patterns or relationships in data using digital technologies as appropriate (ACSIS129) • Summarise data, from students' own investigations and secondary sources, and use scientific understanding to identify relationships and draw conclusions based on evidence (ACSIS130) *Evaluating* • Reflect on scientific investigations including evaluating the quality of the data collected, and identifying improvements (ACSIS131) • Use scientific knowledge and findings from investigations to evaluate claims based on evidence (ACSIS132) *Communicating* Communicate ideas, findings and evidence based solutions to problems using scientific language, and representations, using digital technologies as appropriate (ACSIS133)
	General Capabilities: *Literacy, Numeracy, Personal & Social Capability.* *Critical & Creative Thinking,* • Inquiring, identifying and exploring and organising information and ideas. • Generating ideas, possibilities and actions. • Reflecting on thinking and processes. • Analysing, synthesising and evaluating reasoning and procedures.
	Cross Curricular Priorities: *Sustainability*