

Senior Primary (3-6) Curriculum Links

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Introduction

Jingeri Jimbelungs! (Greetings friends) We acknowledge and pay respects to the Kombumerri people, the Traditional Owners of the djagun (land) in our area, which is part of the Yugambeh Language Region across South East Queensland. In Kombumerri language, Numinbah means <u>'place of holding tight</u>'.

<u>Numinbah Valley Environmental Education Centre</u> is a Department of Education school and one of 25 Outdoor and Environmental Education Centres throughout Queensland. Our school vision is: Inspiring Minds for a Sustainable Future.

Our Programs

Our customised camp & day programs onsite, along with our field study and incursion programs offsite, are designed to assist partner schools in meeting goals linked to the Australian Curriculum (P-10), Queensland Curriculum and Assessment Authority (11-12) and other specialised learning areas; with a specific focus on authentically integrating the cross-curriculum priorities of Aboriginal and Torres Strait Islander Histories and Cultures; and Sustainability; into centre operations and program delivery. We have a dynamic Reconciliation Action Plan (RAP), which is showcased in this short film - <u>ReconciliACTION – First Nations Connections</u>.

Our Pedagogy

The strengths of all programs we facilitate, lie in our clarity of purpose and holistic learning framework; highlighting place-responsive, culturally-informed and interconnected ways of learning. Our whole-school approach to pedagogy framework, 'Learning at Numinbah Valley Environmental Education Centre', informs our teaching and learning practices. Learning is at the centre and our core learning foundations are Engaged, Active, Collaborative and Reflective learning. We hold the expectation that all students, staff, mentors, visitors & stakeholders connected with our centre, are on a learning journey – pedagogically, operationally and strategically. As such, this holistic framework informs our ways of learning, staff culture and community engagement.

Our Location

Through engaging with our programs, students have the opportunity to gain unique and specific benefits from outdoor learning. Our base location within Springbrook National Park and strong relationships with First Nations cultural mentors, Queensland Parks and Wildlife Services, Seqwater and other stakeholders, enables us to offer authentic educational experiences that utilise the hinterland and catchment areas of the Nerang River and Hinze Dam, the forests and geology of the Springbrook plateau and other exceptional locations. <u>Curriculum Connection: Outdoor Learning</u>



Further Information

Visit the website: <u>https://numinbahvalleyeec.eq.edu.au/</u> or contact our friendly staff at: 07 5548 0333 / <u>admin@numinbahvalleyeec.eq.edu.au</u>

Website Overview Statement

The content and presentation of our senior primary activities are adjusted according to age level, learning needs of the group, and literacy and numeracy skills. Each activity runs for approximately 60 to 90 minutes, which allows for 3-4 activities to be built into a day program (except the Springbrook Ecology Walk and Solar Boats Challenge, which each run for a whole day).

Multi-day camp programs can be created for senior primary students incorporating options listed below and other recreation and team building activities.

Many of these activities are also well-suited for shorter incursion programs delivered onsite at your school.



Blindfold Challenge

In this sensory outdoor activity, students must navigate a bushland obstacle course while blindfolded, relying on their senses and teamwork. The challenge requires them to refine and apply their fundamental movement skills and adapt strategies in unfamiliar settings. With minimal guidance, students are encouraged to apply creative thinking and problem-solving to navigate the course successfully, enhancing their confidence and ability to overcome challenges. The activity also emphasises the importance of safety, wellbeing, personal growth, teamwork and active participation in outdoor environments.

Key Concepts:

- **Movement Skills:** Refining and adapting movement strategies in unpredictable outdoor situations.
- **Problem Solving:** Applying creative thinking to movement challenges.
- **Participation & Wellbeing:** Participate in physical activities that enhance health and wellbeing in natural and outdoor settings.
- Health & Safety: Investigating behaviours that contribute to safety and wellbeing.

Curriculum Links

Years 3 & 4 Years 5 & 6 Cross Curriculum Priorities/General Capabilities



Blindfold Challenge Curriculum Links – Years 3 & 4

Health & Physical Education

Moving our bodies

Refine and apply fundamental movement skills in new movement situations. (<u>AC9HP4M01</u>) Apply and adapt movement strategies to achieve movement outcomes. (<u>AC9HP4M02</u>) Demonstrate how movement concepts related to effort, space, time, objects and people can be applied when performing movement sequences. (<u>AC9HP4M03</u>)

Learning through Movement

Apply creative thinking when designing movement sequences and solving movement problems. (<u>AC9HP4M07</u>)

Elaboration: Drawing on prior knowledge from other physical activity experiences to solve challenges faced when participating in outdoor activities.

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Interacting with Others

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

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Blindfold Challenge Curriculum Links – Years 5 & 6

Health & Physical Education

Moving our bodies

Adapt and modify movement skills across a variety of situations. (<u>AC9HP6M01</u>) Transfer familiar movement strategies to different movement situations. (<u>AC9HP6M02</u>) Investigate how different movement concepts related to effort, space, time, objects and people can be applied to improve movement outcomes. (<u>AC9HP6M03</u>)

Learning through Movement

Predict and test the effectiveness of applying different skills and strategies in a range of movement situations. (<u>AC9HP6M07</u>)

Elaboration: Adapting movement skills and strategies from other contexts to generate creative solutions to unfamiliar movement challenges when participating in outdoor activities. **Making Active Choices**

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing.

Interacting with Others

Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)



Blindfold Challenge Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

General Capabilities

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.



Bush Cooking

In this learning activity, students engage with bushcraft cooking methods including boiling a billy and cooking damper over an open fire. They explore how Science and Geography intersect with cultural practices, focusing on fire safety and sustainable use of resources in outdoor settings. Students also reflect on the connections and custodial responsibility that First Nations Australians have for Country/Place and how cultural & scientific knowledge helps informs decision-making for resource management. Students practice personal and social capability skills by working in small groups, navigating the challenge of cooking over a fire while maintaining safety. These experiences foster self-management and social management skills as students collaborate to achieve a common goal. They will also investigate how human actions impact natural environments and propose ways to make informed and sustainable decisions for the future.

Key Concepts:

- Safety & Sustainability Safety, risk management and sustainable use of resources.
- Scientific Inquiry The role of science in creation of heat & light energy, key survival techniques & for problem solving.
- **First Nations Connections** Valuing cultural diversity & respect for First Nations perspectives in caring for and managing Country.
- **Personal and Social Skills** Mental health, wellbeing, and sense of belonging in group & outdoor settings.

Curriculum Links

Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



Bush Cooking Curriculum Links – Year 4

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S4H02)

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent (<u>AC9HS4K05</u>)

Sustainable use and management of renewable and non-renewable resources, including the custodial responsibility First Nations Australians have for Country/Place. (AC9HS4K06)

Concluding & Decision Making

Propose actions or responses to an issue or challenge that consider possible effects of actions. (<u>AC9HS4S06</u>)

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Bush Cooking Curriculum Links – Year 5

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S5H02</u>)

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management.

Economics and Business

Types of resources including natural, human and capital, and how they satisfy needs and wants. (<u>AC9HS5K08</u>)

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>)

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Bush Cooking Curriculum Links – Year 6

Science Understanding

Biological Sciences:

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. (AC9S6U01)

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Chemical Sciences

Compare reversible changes, including dissolving and changes of state, and irreversible changes, including cooking and rusting that produce new substances. (<u>AC9S6U04</u>)

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S6H02</u>)

Economics and Business

Influences on consumer choices and strategies that can be used to help make informed personal consumer and financial choices. (<u>AC9HS6K08</u>)

Concluding & Decision Making

Propose actions or responses to issues or challenges and use criteria to assess the possible effects. (AC9HS6S06)

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>)

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing.

Interacting with Others

Describe and implement strategies to value diversity in their communities. (<u>AC9HP6P05</u>) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Bush Cooking Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting. **Personal and Social Capabilities -** Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Canoeing

Immersive canoeing activities are facilitated on Hinze Dam - a flat, inland, fresh waterway, fed by the Nerang River. Utilising open Canadian canoes propelled by paddles, students develop teamwork skills, movement strategies and paddling techniques as they journey in beautiful, natural surrounds. Through observation and exploration, students will engage with biological concepts and ecological interactions, developing an appreciation for traditional knowledge systems and cultural significance of water Country to First Nations peoples; recognising how cultural narratives and water management practices can support biodiversity. Additionally, the program highlights the importance of healthy ecosystems, conservation, and the role of humans in maintaining these environments through active custodianship.

Key Concepts:

- **Ecosystem Interactions:** Investigate the characteristics of ecosystems and the relationships between living organisms and their environments, fostering an understanding of biodiversity and ecological balance.
- **Connection to Country:** Explore First Nations histories, cultures, traditional knowledge systems and ways of connecting to and caring for Country; including sustainable water management practices.
- Environmental Management: Examine how environments are managed and shaped by human activity and the importance of conservation, sustainable practices and environmental custodianship.
- **Making Active Choices** Participate in physical activities that enhance health and wellbeing in natural and outdoor settings.

Curriculum Links

Year 5 Year 6 Cross Curriculum Priorities/General Capabilities



Canoeing Curriculum Links – Year 5

Biological Sciences

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (AC9S5U01)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Science Inquiry

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (AC9S5I01)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things.

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management. The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences. (AC9HS5K05) **Elaboration:** Exploring how environments are used and managed, such as the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks.

Economics & Business

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (<u>AC9HS5K08</u>)

Elaboration: Distinguishing between needs and wants, and how resources might be used more sustainably to meet these needs and wants into the future.

Health & Physical Education

Moving our bodies

Refine and apply fundamental movement skills in new movement situations. (<u>AC9HP4M01</u>) Apply and adapt movement strategies to achieve movement outcomes. (<u>AC9HP4M02</u>) Demonstrate how movement concepts related to effort, space, time, objects and people can be applied when performing movement sequences. (<u>AC9HP4M03</u>)

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (<u>AC9HP6P05</u>) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing.



Canoeing Curriculum Links – Year 6

Biological Sciences

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. (AC9S6U01)

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Elaborations: Investigate how contemporary restorative ecology adapts and builds on the traditional ecological knowledges of First Nations Australians.

Examining why ecologists collaborate with engineers & computer scientists to develop management & tracking techniques, identify patterns in habitat change & make predictions.

Health & Physical Education

Moving our bodies

Adapt and modify movement skills across a variety of situations. (<u>AC9HP6M01</u>) Transfer familiar movement strategies to different movement situations. (<u>AC9HP6M02</u>) Investigate how different movement concepts related to effort, space, time, objects and people can be applied to improve movement outcomes. (<u>AC9HP6M03</u>)

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Canoeing Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting. **Personal and Social Capabilities -** Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Creature Feature

Students will interact with a variety of native animals (primarily reptiles) to deepen their understanding of Australia's unique wildlife. Through hands-on experiences, they will explore the characteristics of animals and compare the life cycles of different species. Students will examine the specific features and behaviours that enable animals to survive in their natural habitats, and investigate the roles of consumers, producers, and decomposers within ecosystems, understanding how food chains represent feeding relationships. First Nations cultural perspectives will be integrated, focusing on interconnections with Country/Place and how cultural narratives and traditional knowledge systems shape our understanding of biodiversity. In addition, students will engage in discussions about health and safety, explore how personal choices and behaviours can support sustainability, reflect on the value of diversity, and understand how respect and empathy foster positive relationships.

Key Concepts:

- Life Cycles and Habitats Survival features and behaviours; predator-prey relationships; roles of consumers, producers, and decomposers.
- **First Nations Connections** Connection & care for Country; human-animal-land relationships; totem knowledge systems for sustainability.
- **Social & Environmental Sustainability** Respectful & safe behaviours; environmental care/custodianship for biodiversity & healthy ecosystems.

Curriculum Links

Year 3Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



Science Understanding

Biological Science

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (<u>AC9S3U01</u>)

Elaboration: Investigating how First Nations Australians understand and utilise the life cycles of certain species.

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S3H02)

Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

Health & Physical Education

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaboration: Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.



Science Understanding

Biological Science

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S4H02)

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent. (<u>AC9HS4K05</u>)

Health & Physical Education

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaboration: Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.



Science Understanding

Biological Science

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (AC9S5U01)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S5H02</u>)

Science Inquiry

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (<u>AC9S5I01</u>)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things.

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management.

Health & Physical Education

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (AC9HP6P10)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Science Understanding

Biological Sciences

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. (AC956U01)

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S6H02</u>)

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Elaborations: Investigate how contemporary restorative ecology adapts and builds on the traditional ecological knowledges of First Nations Australians.

Examining why ecologists collaborate with engineers & computer scientists to develop remote sensing techniques, identify patterns in habitat change & make predictions.

Health & Physical Education

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing.

Interacting with Others

Describe and implement strategies to value diversity in their communities. (<u>AC9HP6P05</u>) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Creature Feature Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

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The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



'Crow's Nest' Pole Climb

The 'Crow's Nest' is a 12-metre-high single pole climb featuring a platform that provides participants with a breathtaking view of the forest canopy and surrounding environment. Under the supervision of qualified instructors, participants ascend the pole one at a time, engaging in a 'challenge by choice' climbing activity designed to foster confidence, courage, resilience, and the ability to overcome personal challenges within a supportive team-building environment. This activity not only expands perspectives of the forest from a canopy level but also emphasises the importance of safety, wellbeing, personal growth, teamwork, and active participation in outdoor settings. By engaging in this physical activity, participants will refine movement skills, enhance problem-solving abilities, and understand factors influencing participation and wellbeing in natural environments, all while promoting health and safety.

Key Concepts:

- **Movement Skills:** Refining and adapting movement strategies in unpredictable outdoor situations.
- **Problem Solving:** Applying creative thinking to movement challenges.
- **Participation & Wellbeing:** Participate in physical activities that enhance health and wellbeing in natural and outdoor settings.
- Health & Safety: Investigating behaviours that contribute to safety and wellbeing when engaging in high-risk activity.

Curriculum Links

Year 5 & 6 Cross Curriculum Priorities/General Capabilities



'Crow's Nest' Pole Climb Curriculum Links – Years 5 & 6

Health & Physical Education

Moving our bodies

Adapt and modify movement skills across a variety of situations. (<u>AC9HP6M01</u>)

Transfer familiar movement strategies to different movement situations. (<u>AC9HP6M02</u>) Investigate how different movement concepts related to effort, space, time, objects and people can be applied to improve movement outcomes. (<u>AC9HP6M03</u>)

Learning through Movement

Predict and test the effectiveness of applying different skills and strategies in a range of movement situations. (<u>AC9HP6M07</u>)

Elaboration: Adapting movement skills and strategies from other contexts to generate creative solutions to unfamiliar movement challenges when participating in outdoor activities.

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>)

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing.

Interacting with Others

Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)

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'Crow's Nest' Pole Climb Cross Curriculum Priorities & General Capabilities <u>Cross Curriculum Priorities</u>

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Day on Country

This immersive day program invites students to develop a deeper appreciation and understanding of First Nations peoples' cultures, histories, scientific knowledge, and ways of surviving and thriving on Country. Students will participate in hands-on activities incorporating language, stories, music, and games; bush technologies and tools—including techniques for making shelter and fire; and the use of seasonal calendars for sourcing food and fibres. They will explore yarning protocols, totem systems, and cultural reflection, gaining insights into how traditional knowledge systems integrate sustainability concepts and practices. Through these activities, students will learn about the importance of cultural perspectives in maintaining healthy ecosystems. Engaging with First Nations ways of learning offers students opportunities to strengthen connections to themselves, others, and Country.

Key Concepts:

- **Country/Place & Culture** Connection to land, water, language, totems, cultural narratives, and yarning.
- Science & Sustainability Interconnected ecosystems, sustainable use of resources, and environmental care.
- **Technology & Survival** Traditional tools, heat energy for cooking, shelters, and resource management.
- Health, Wellbeing & Collaboration Promoting healthy lifestyles, wellbeing, teamwork, and problem-solving in authentic contexts.

Curriculum Links

Year 3Year 4Year 5Cross Curriculum Priorities/General Capabilities



Day on Country Curriculum Links – Year 3

Biological Sciences

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (AC9S3U01)

Elaboration: Investigating how First Nations Australians understand and utilise the life cycles of certain species.

Physical Sciences

Identify sources of heat energy and examine how temperature changes when heat energy is transferred from one object to another (<u>AC9S3U03</u>)

Elaboration: Investigating how changes of state in materials used by First Nations Australians such as beeswax or resins are important for their use.

Earth and Physical Sciences

Compare the observable properties of soils, rocks & minerals and investigate why they are important Earth resources. (<u>AC9S3U02</u>)

Elaboration: Investigating First Nations Australians' knowledges of different rock and mineral types, and how they were used for stone blades, grindstones & pigments.

Use & Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (<u>AC9S3H02</u>)

Elaboration: Recognising how First Nations Australians observe & describe developmental changes in plants & animals to make decisions about when to harvest certain resources.

Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

The representation of contemporary Australia as states and territories, and as the Countries/Places of First Nations Australians prior to colonisation. (AC9HS3K03)

Elaboration: Compare the boundaries of Aboriginal Countries & Torres Strait Islander Places with the surveyed boundaries between Australian states & territories, to gain an appreciation of the different ways Australia can be represented.

Design & Technologies

Examine design and technologies occupations and factors including sustainability that impact on the design of products, services and environments to meet community needs. (<u>AC9TDE4K01</u>)

Elaboration: Exploring how many First nations Australians were & continue to be recognised for their specialist skill sin designing and producing products made from local material s& providing related services, using sustainable practices to ensure future access to meet community needs, for example, traditional adhesives.

Describe how forces & the properties of materials affect function in a product or system. (<u>AC9TDE4K02</u>)

Elaboration: Researching how First Nations Australians consider buoyant forces as they select materials for watercraft, for example making bark or dugout canoes.



Describe the ways of producing food & fibre. (AC9TDE4K03)

Elaboration: Researching food & fibre production techniques & technologies developed by First nations Australians such as burning, tilling, planting, transplanting, watering, irrigating, weeding, thinning, cropping, storing & trading food.

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Day on Country Curriculum Links – Year 4

Biological Sciences

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Recognising how First Nations Australians perceive themselves as being an integral part of the environment.

Chemical Sciences

Examine the properties of natural & made materials including fibres, metals, glass & plastics and consider how these properties influence their use. (<u>AC9S4U04</u>)

Elaboration: Considering how First Nations Australians use materials for different purposes, such as tools, clothing & shelter, based on their properties.

Earth and Space Sciences

Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation. (<u>AC9S4U02</u>)

<u>History</u>

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (<u>AC9HS4K01</u>)

Elaboration: Exploring the connection of First Nations Australians to the land and water and how they manage these resources.

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent. (<u>AC9HS4K05</u>)

Elaborations: Explaining how people's connections with their environment can also be aesthetic, emotional and spiritual.

Exploring strategies to protect particular environments that provide habitats for animals; for example, planting bird-attracting vegetation.

Identifying the importance of water to the environment and to sustaining the lives of people and animals.

Sustainable use and management of renewable and non-renewable resources, including the custodial responsibility First Nations Australians have for Country/Place. (AC9HS4K06)



Design & Technologies

Examine design and technologies occupations and factors including sustainability that impact on the design of products, services and environments to meet community needs. (<u>AC9TDE4K01</u>)

Elaboration: Exploring how many First nations Australians were & continue to be recognised for their specialist skills in designing and producing products made from local materials & providing related services, using sustainable practices to ensure future access to meet community needs, for example, traditional adhesives.

Describe how forces & the properties of materials affect function in a product or system. (<u>AC9TDE4K02</u>)

Elaboration: Researching how First Nations Australians consider buoyant forces as they select materials for watercraft, for example making bark or dugout canoes.

Describe the ways of producing food & fibre. (AC9TDE4K03)

Elaboration: Researching food & fibre production techniques & technologies developed by First nations Australians such as burning, tilling, planting, transplanting, watering, irrigating, weeding, thinning, cropping, storing & trading food.

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Day on Country Curriculum Links – Year 5

Biological Sciences

Examine how particular structural features and behaviours of living things enable their survival in specific habitats.

(<u>AC9S5U01</u>)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Chemical Sciences

Explain observable properties of solids, liquids and gases by modelling the motion and arrangement of particles. (<u>AC9S5U04</u>)

Elaboration: Recognising First Nations Australians' knowledges and understandings of solids, liquids & gases and how these knowledges are applied in a range of processes and practices, including the extraction of oils, medical therapies & cooking.

Science Inquiry

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (<u>AC9S5I01</u>)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things.

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management; for example, firestick farming.

The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences. (<u>AC9HS5K05</u>)

Elaboration: Exploring how environments are used and managed, such as the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks.

Economics & Business:

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (<u>AC9HS5K08</u>)

Elaboration: Distinguishing between needs and wants, and how resources might be used more sustainably to meet these needs and wants into the future.

Design & Technologies

Explain how people in <u>Design & Technologies</u> occupations consider competing factors including sustainability in the design of products, services & environments. (<u>AC9TDE6K01</u>) **Elaboration:** Investigating how First Nations Australians have long considered competing factors especially those related to sustainability in the design of harvesting technologies.



Explain how and why food & fibre are produced in managed environments. (<u>AC9TDE6K03</u>) **Elaboration:** Exploring how before colonisation, First Nations Australians lived in discrete communities that cared for, protected & sustainably harvested food & fibre resources, some of which are now cultivated to meet domestic & international demand, for example bunya nuts, macadamia & finger limes.

Explain how characteristics & properties of materials, systems, components, tools & equipment affect their use when producing designed solutions. (AC9TDE6K05) **Elaboration:** Investigating how First Nations Australians have long used material science knowledge to identify materials & preparation techniques to meet performance needs, for example twining techniques of string & rope fibres to ensure suitability for use in wet, dry, freshwater & saltwater applications.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Day On Country Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting. **Personal and Social Capabilities** - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Energy Trailer

This hands-on program deepens students' understanding of energy, with a focus on electrical energy, transfer, and transformation. Students engage with turbines, solar technologies, and other learning tools to investigate how electrical energy is generated in Australia, considering environmental and economic impacts of non-renewable systems. They also have fun transforming their own kinetic energy to power a range of everyday devices. The Energy Trailer serves as a platform for students to compare and evaluate renewable energy sources and explore how Australia's energy needs can be met. Students also explore scientific inquiry processes, such as posing questions, collecting and analysing data, and evaluating findings to draw reasoned conclusions. Additionally, they examine how science and technology collaborate to address societal needs and how design decisions incorporate sustainability principles. Through the lens of consumer choices, students consider personal and community strategies for promoting sustainable energy solutions.

Key Concepts:

- **Energy:** The ability to do work, transferred and transformed in various forms (e.g., electrical, kinetic).
- **Electricity:** A form of energy resulting from the flow of electric charge, essential in powering modern systems.
- **Transform and Transfer:** Conversion of energy from one form to another and its movement through systems (e.g., kinetic to electrical in turbines).
- **Renewable and Non-Renewable Energy:** Resources like solar or wind that replenish versus finite sources like coal.
- **Turbine:** A device that converts kinetic energy (wind or water) into mechanical or electrical energy.
- **Solar Energy:** Energy harnessed from the sun, often through photovoltaic cells in solar panels.
- **Coal Power:** A non-renewable energy source widely used in Australia, contributing to environmental challenges.
- **Environment:** The natural world affected by energy systems, with an emphasis on sustainable practices to minimise harm.
- **Sustainability:** The practice of designing solutions that meet present needs without compromising future resources.
- Scientific Inquiry: Processes used to ask questions, collect data, and form evidencebased conclusions.
- **Design and Technologies:** Systems & tools created by integrating scientific principlese.g. electrical energy transformations in engineered products.
- **Consumer Choices:** Decisions made by individuals or communities regarding products and energy use, influencing sustainability outcomes.

Curriculum Links

<u>Year 5</u> <u>Year 6</u> <u>Cross Curriculum Priorities/General Capabilities</u>



Energy Trailer Curriculum Links – Year 5

Design Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments. (<u>AC9TDE6K01</u>) **Technologies Context: Engineering Principles and Systems**

Explain how electrical energy can be transformed into movement, sound or light in a product or system. (AC9TDE6K02)

Elaborations: Explaining how sun tracking of solar panels assists renewable energy production in communities classified as remote.

Describing the process need to carefully plan and select components for a system to perform a specific task, for example, planning the arrangement of switches, light globes and a power source in a lighting design.

Materials and Technologies Specialisations

Explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions. (AC9TDE6K05) Elaboration: Identifying and describing the properties of materials for the design and construction of a household product or system to improve household sustainability, for example, a product for storing harvested water or reducing energy consumption. Investigating and Defining

Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions. (<u>AC9TDE6P01</u>)

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Energy Trailer Curriculum Links – Year 6

Science Knowledge & Understanding

Physical Sciences

Investigate the transfer and transformation of energy in electrical circuits, including the role of circuit components, insulators and conductors. (AC9S6U03)

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Use and Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (AC9S6H02)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns and test relationships and make reasoned predictions. (<u>AC9S6I01</u>)

Planning and Conducting

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S6I03</u>)



Processing, Modelling & Analysing

Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data & information and describe patterns, trends & relationships.

Elaboration: Representing circuits using virtual simulations or circuit diagrams and indicating the direction of electricity flow. (<u>AC9S6I04</u>)

Evaluating

Compare methods and findings with those of others, recognise possible sources of error, post questions for further investigation and select evidence to draw reasoned conclusions. (<u>AC9S6I05</u>)

Economics and Business

Influences on consumer choices and strategies that can be used to help make informed personal consumer and financial choices.

(AC9HS6K08)

HASS Skills

Questioning and Researching Develop questions to investigate people, events, developments, places and systems. (<u>AC9HS6S01</u>)

Concluding and Decision making

Propose actions or responses to issues or challenges and use criteria to assess the possible effects. (<u>AC9HS6S06</u>)

Design Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments. (<u>AC9TDE6K01</u>)

Technologies Context: Engineering Principles and Systems

Explain how electrical energy can be transformed into movement, sound or light in a product or system. (AC9TDE6K02)

Elaborations: Explaining how sun tracking of solar panels assists renewable energy production in communities classified as remote.

Describing the process need to carefully plan and select components for a system to perform a specific task, for example, planning the arrangement of switches, light globes and a power source in a lighting design.

Materials and Technologies Specialisations

Explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions. (<u>AC9TDE6K05</u>)

Elaboration: Identifying and describing the properties of materials for the design and construction of a household product or system to improve household sustainability, for example, a product for storing harvested water or reducing energy consumption.

Investigating and Defining

Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions. (<u>AC9TDE6P01</u>)



Energy Trailer Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting. **Personal and Social Capabilities** - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Environmental Mandalas

In these sensory activities, students engage with First Nations ways of learning and connecting to Country through storytelling, art, and creative endeavours. By utilising natural materials such as seeds, feathers, pebbles, plant matter, bark, and grasses, students create mandalas and small artistic installations that reflect their individual experiences in the natural environment. Inspired by the endangered Glossy Black Cockatoo (Baleirei), a totem from Numinbah Valley EEC, students explore and strengthen their connections to themselves, their peers, and Country/Place. Through comparing and contrasting their individual experiences, they contribute to a collective visual narrative—'My Story, Your Story, Our Story.' This program emphasises safety, wellbeing, mindfulness, personal growth, teamwork, and environmental custodianship. A key stage of the workshop involves dismantling their creations, reinforcing the concept of ephemerality and the idea that their work leaves no lasting impact on the environment.

Key Concepts:

- **First Nations Connections:** Understanding the significance of First Nations Australians' cultural practices & deep connections to Country/Place.
- **Problem Solving:** Applying creative thinking to artistic challenges.
- **Custodianship:** Learning about the importance of environmental care, conservation, and custodianship.
- **Wellbeing:** Engaging in activities that promote health and wellbeing in natural settings, considering safety factors.
- **Social Skills:** Enhancing teamwork, communication, and social interaction through collaborative activities.

Curriculum Links

Year 3 & 4Year 5 & 6Cross Curriculum Priorities/General Capabilities



Environmental Mandalas Curriculum Links – Years 3 & 4

Year 3 Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

Year 4 History

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (AC9HS4K01)

Visual Arts

Exploring and Responding

Explore where, why and how visual arts are created and/or presented across cultures, times, places and/or other contexts. (<u>AC9AVA4E01</u>)

Elaborations: Exploring ways to represent the world as they see it; for example, using ideas and experience about a recent event and making an artwork that communicates their perspective of the event; and then identifying how their work is different from the works created by other students in the class that feature similar subject matter.

Identifying ways that artworks by different artists can present multiple perspectives of the same event and discussing how these works can develop social awareness; for example, accessing and comparing artists and artworks that explore sustainability, such as land art.

Explore how First Nations Australians use visual arts to communicate their connection to and responsibility for Country/Place. (<u>AC9AVA4E02</u>)

Elaborations: Looking at visual artworks that represent the importance of Country/Place and Story for First Nations Australians as a starting point for talking about different ways of seeing the same place and telling stories.

Considering what their own cultural connections are as individuals to use visual arts processes and conventions to create artworks that communicate their personal connection to place. Exploring visual conventions, symbols or patterns with representatives of a First Nations Australian community, or resources that are created or co-created by First Nations

Australians; for example, exploring artworks that share cultural accounts of Country/Place. **Developing Practices and Skills**

Experiment with a range of ways to use visual conventions, visual arts processes and materials. (<u>AC9AVA4D01</u>)

Elaboration: Exploring materials based on visual conventions; for example, creating a tactile (texture) board form a collection of materials and objects.

Creating and Making

Use visual conventions, visual arts processes and materials to create artworks that communicate ideas, perspectives and/or meaning. (<u>AC9AVA4C01</u>)

Presenting and Performing

Share and/or display artworks and/or visual arts practice in informal settings. (<u>AC9AVA4P01</u>)

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)



Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Environmental Mandalas Curriculum Links – Years 5 & 6

Year 5 Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Visual Arts

Exploring and Responding

Explore ways that visual conventions, visual arts processes and materials are combined to communicate ideas, perspectives and/or meaning in visual arts across cultures, times, places and/or other contexts. (<u>AC9AVA6E01</u>)

Elaboration: Identifying ways that artworks by different artists can present multiple perspectives of the same event and discussing how these works can develop social awareness. Explore ways that First Nations Australians use visual arts to continue and revitalise cultures. (AC9AVA6E02)

Elaborations: Exploring ways that visual arts created by First Nations Australians may have multiple purposes; for example, art as cultural practice, art to communicate cultural understandings, or as narrative.

Investigating a range of site-specific artworks created by First Nations Australian artists, exploring how they communicate and celebrate cultural knowledge & understandings. Investigating how meaning and purpose are communicated in artworks & design created or co-created by First Nations Australians; for example, learning about how visual conventions are used in artworks & designs, such as textiles and fashion, to share cultural knowledge with the broader community.

Developing Practices and Skills

Experiment with, document and reflect on ways to use a range of visual conventions, visual arts processes, and materials. (<u>AC9AVA6D01</u>)

Elaboration: Making informed choices about using various combinations of representational elements appropriate for a concept of subject matter.

Creating and Making

Use visual conventions, visual arts processes and materials to plan and create artworks that communicate ideas, perspectives and/or meaning. (<u>AC9AVA6C01</u>)

Presenting and Performing

Select and present documentation of visual arts practice, and display artworks in informal and/or formal settings. (<u>AC9AVA6P01</u>)

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.

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Inspiring Minds for a Sustainable Future

Environmental Mandalas Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



E-Waste Innovation

This interactive workshop engages students with the local and global challenges of managing electronic waste. Students explore how social enterprises use technology and innovation to divert waste from landfill by extracting, recycling, and repurposing valuable components from electronic devices. Students will safely use basic tools to 'urban mine' including dismantling, sorting and retrieving useful electrical, metal and plastic parts from laptop computers, which will then be sent to an e-waste innovation hub to be upcycled and/or repurposed. Throughout the program, students critically examine technologies, identify sustainable design solutions, and reflect on the environmental impacts of production and consumption. Opportunities for ongoing inquiry-based learning back in the classroom could be explored.

Key Concepts:

- **Technology:** The application of digital and mechanical tools to solve problems.
- Innovation: Developing creative solutions to address environmental challenges.
- **Production:** The process of manufacturing goods, including electronic devices.
- **Consumption:** How goods and resources are used and discarded by individuals and communities.
- **Waste:** Discarded materials, particularly e-waste, that can be harmful or repurposed.
- Environment: The natural world affected by human production and waste.
- **Sustainability:** Practices that support long-term environmental health and resource management.

Curriculum Links

<u>Year 5</u> <u>Year 6</u> <u>Cross Curriculum Priorities/General Capabilities</u>



E-Waste Curriculum Links – Year 5

Digital Technologies

Digital Systems

Investigate the main internal components of common digital systems and their function. (AC9TDI6K01)

Elaborations: Explaining how digital systems are made up of parts that perform specific functions, for example the processor controls the tablet, performs calculations & manipulates data.

Exploring how the central processing unit (CPU), memory and input/output components work together to perform simple calculations.

Generating and Designing

Generate, modify, communicate & evaluate designs. (AC9TDI6P04)

Evaluating

Evaluate existing & student solutions against the design criteria & user stories and their broader community impact. (<u>AC9TDI6P06</u>)

Design Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments (<u>AC9TDE6K01</u>)

Technologies Context: Engineering Principles and Systems

Explain how electrical energy can be transformed into movement, sound or light in a product or system. (AC9TDE6K02)

Materials and Technologies Specialisations

Explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions. (<u>AC9TDE6K05</u>)

Investigating and Defining

Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions. (<u>AC9TDE6P01</u>)

Generating and Designing

Generate, iterate and communicate design ideas, decisions and processes using technical terms and graphical representation techniques, including using digital tools. (<u>AC9TDE6P02</u>)

Producing and Implementing

Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions. (<u>AC9TDE6P03</u>)

Evaluating

Negotiate design criteria including sustainability to evaluate design ideas, processes and solutions. (<u>AC9TDE6P04</u>)



E-Waste Curriculum Links – Year 6

Science Knowledge & Understanding

Physical Sciences

Investigate the transfer and transformation of energy in electrical circuits, including the role of circuit components, insulators and conductors. (AC9S6U03)

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Use and Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (AC9S6H02)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns and test relationships and make reasoned predictions. (<u>AC9S6I01</u>)

Planning and Conducting

Plan and conduct repeatable investigations to answer questions including, as appropriate, deciding the variables to be changed, measured and controlled in fair tests; describing potential risks; planning for the safe use of equipment and materials; and identifying required permissions to conduct investigations on Country/Place. (<u>AC9S6102</u>)

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S6I03</u>)

Processing, Modelling & Analysing

Construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data & information and describe patterns, trends & relationships. (AC9S6I04)

Evaluating

Compare methods and findings with those of others, recognise possible sources of error, post questions for further investigation and select evidence to draw reasoned conclusions. (<u>AC9S6I05</u>)

Economics and Business

Influences on consumer choices and strategies that can be used to help make informed personal consumer and financial choices. (AC9HS6K08)

HASS Skills

Questioning and Researching

Develop questions to investigate people, events, developments, places and systems. (<u>AC9HS6S01</u>)

Concluding and Decision making

Propose actions or responses to issues or challenges and use criteria to assess the possible effects. (<u>AC9HS6S06</u>)



Digital Technologies

Digital Systems

Investigate the main internal components of common digital systems and their function. (AC9TDI6K01)

Elaborations: Explaining how digital systems are made up of parts that perform specific functions, for example the processor controls the tablet, performs calculations & manipulates data.

Exploring how the central processing unit (CPU), memory and input/output components work together to perform simple calculations.

Generating and Designing

Generate, modify, communicate & evaluate designs. (AC9TDI6P04)

Evaluating

Evaluate existing & student solutions against the design criteria & user stories and their broader community impact. (<u>AC9TDI6P06</u>)

Design Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments (<u>AC9TDE6K01</u>)

Technologies Context: Engineering Principles and Systems

Explain how electrical energy can be transformed into movement, sound or light in a product or system. (AC9TDE6K02)

Materials and Technologies Specialisations

Explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions. (<u>AC9TDE6K05</u>)

Investigating and Defining

Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions. (AC9TDE6P01)

Generating and Designing

Generate, iterate and communicate design ideas, decisions and processes using technical terms and graphical representation techniques, including using digital tools. (<u>AC9TDE6P02</u>)

Producing and Implementing

Select and use suitable materials, components, tools, equipment and techniques to safely make designed solutions. (<u>AC9TDE6P03</u>)

Evaluating

Negotiate design criteria including sustainability to evaluate design ideas, processes and solutions. (AC9TDE6P04)



E-Waste Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



First Nations Art Connections

In these sensory activities, students explore First Nations ways of learning and connecting to Country through storytelling, art, and creative endeavour. They create artefacts that reflect their individual experiences in the natural environment and foster connections to themselves, their peers, and Country/Place. By comparing and contrasting their experiences (similarities and differences), students contribute to a larger, collective visual narrative – 'My Story, Your Story, Our Story.' Inspired by Numinbah Valley EEC's totem, the Glossy Black Cockatoo (Baleirei), students develop personal affirmations for positive self-perception and wellbeing, emphasizing the importance of language, intentions, and behaviours linked to environmental custodianship.

Key Concepts:

- **Cultural Heritage:** Understanding the historical and contemporary significance of First Nations Australians' cultural practices.
- Wellbeing: Engaging in activities that promote health and wellbeing in natural settings.
- **Custodianship:** Learning about the importance of environmental care, conservation & custodianship.
- **Country/Place:** Appreciating deep connections to Country/Place and the natural environment.
- **Social Skills:** Enhancing teamwork, communication, and social interaction through collaborative activities.

Curriculum Links

Year 3 & 4 Year 5 & 6 Cross Curriculum Priorities/General Capabilities

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First Nations Art Connections Curriculum Links – Years 3 & 4

Year 3 Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

Year 4 History

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (AC9HS4K01)

Visual Arts

Exploring and Responding

Explore where, why and how visual arts are created and/or presented across cultures, times, places and/or other contexts. (<u>AC9AVA4E01</u>)

Elaborations: Exploring ways to represent the world as they see it; for example, using ideas and experience about a recent event and making an artwork that communicates their perspective of the event; and then identifying how their work is different from the works created by other students in the class that feature similar subject matter.



Inspiring Minds for a Sustainable Future

Identifying ways that artworks by different artists can present multiple perspectives of the same event and discussing how these works can develop social awareness; for example, accessing and comparing artists and artworks that explore sustainability, such as land art. Explore how First Nations Australians use visual arts to communicate their connection to and responsibility for Country/Place. (<u>AC9AVA4E02</u>)

Elaborations: Looking at visual artworks that represent the importance of Country/Place and Story for First Nations Australians as a starting point for talking about different ways of seeing the same place and telling stories.

Considering what their own cultural connections are as individuals to use visual arts processes and conventions to create artworks that communicate their personal connection to place. Exploring visual conventions, symbols or patterns with representatives of a First Nations Australian community, or resources that are created or co-created by First Nations

Australians; for example, exploring artworks that share cultural accounts of Country/Place. **Developing Practices and Skills**

Experiment with a range of ways to use visual conventions, visual arts processes and materials. (AC9AVA4D01)

Creating and Making

Use visual conventions, visual arts processes and materials to create artworks that communicate ideas, perspectives and/or meaning. (<u>AC9AVA4C01</u>)

Presenting and Performing

Share and/or display artworks and/or visual arts practice in informal settings. (AC9AVA4P01)

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



First Nations Art Connections Curriculum Links – Years 5 & 6

Year 5 Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Visual Arts

Exploring and Responding

Explore ways that visual conventions, visual arts processes and materials are combined to communicate ideas, perspectives and/or meaning in visual arts across cultures, times, places and/or other contexts. (AC9AVA6E01)

Elaboration: Identifying ways that artworks by different artists can present multiple perspectives of the same event and discussing how these works can develop social awareness. Explore ways that First Nations Australians use visual arts to continue and revitalise cultures. (AC9AVA6E02)

Elaborations: Exploring ways that visual arts created by First Nations Australians may have multiple purposes; for example, art as cultural practice, art to communicate cultural understandings, or as narrative.

Investigating a range of site-specific artworks created by First Nations Australian artists, exploring how they communicate and celebrate cultural knowledge & understandings. Investigating how meaning and purpose are communicated in artworks & design created or co-created by First Nations Australians; for example, learning about how visual conventions are used in artworks & designs, such as textiles and fashion, to share cultural knowledge with the broader community.

Developing Practices and Skills

Experiment with, document and reflect on ways to use a range of visual conventions, visual arts processes, and materials. (<u>AC9AVA6D01</u>)

Creating and Making

Use visual conventions, visual arts processes and materials to plan and create artworks that communicate ideas, perspectives and/or meaning. (<u>AC9AVA6C01</u>)

Presenting and Performing

Select and present documentation of visual arts practice, and display artworks in informal and/or formal settings. (<u>AC9AVA6P01</u>)

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.

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Inspiring Minds for a Sustainable Future

First Nations Art Connections Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



First Nations Games

Students will develop a greater understanding and appreciation of First Nations Australian cultures, encompassing both historical and contemporary perspectives. They will engage in, explore, and analyse games and activities from various First Nations cultures across Australia. These games provide insights into traditional lifestyles and living practices. Each game is introduced with cultural context & protocols about its traditional form, followed by gameplay using traditional materials and/or modern sporting equipment to ensure safety and inclusivity. Option 1: Traditional First Nations Games using traditional materials; Option 2: First Nations Games (modern equipment); Option 3: Mixed delivery of traditional resources/modern equipment.

Key Concepts:

- **Cultural Heritage:** Understanding the historical and contemporary significance of First Nations Australians' games.
- **Physical Activity:** Engaging in physical activities that improve health and fitness.
- **Traditional Knowledge:** Learning traditional languages, cultural practices, ways of living & surviving.
- **Place and Environment:** Appreciating connections to Country/Place and the natural environment.
- Social Skills: Enhancing teamwork, communication, and social interaction through play.

Curriculum Links

<u>Year 3 & 4</u> <u>Year 5 & 6</u> <u>Cross Curriculum Priorities/General Capabilities</u>



First Nations Games Curriculum Links – Years 3 & 4

Year 3 Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

Year 4 History

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (AC9HS4K01)

Health & Physical Education

Moving our bodies

Refine and apply fundamental movement skills in new movement situations. (AC9HP4M01) Apply and adapt movement strategies to achieve movement outcomes. (AC9HP4M02) Demonstrate how movement concepts related to effort, space, time, objects and people can be applied when performing movement sequences. (AC9HP4M03)

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Learning through Movement

Perform a range of roles in respectful ways to achieve successful outcomes in group or team movement activities. (<u>AC9HP4M09</u>)

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



First Nations Games Curriculum Links – Years 5 & 6

Year 5 Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Health & Physical Education

Moving our bodies

Adapt and modify movement skills across a variety of situations. (<u>AC9HP6M01</u>) Transfer familiar movement strategies to different movement situations. (<u>AC9HP6M02</u>) Investigate how different movement concepts related to effort, space, time, objects and people can be applied to improve movement outcomes. (<u>AC9HP6M03</u>)

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Learning through Movement**

Participate positively in groups and teams by contributing to group activities, encouraging others and negotiating roles and responsibilities. (<u>AC9HP6M09</u>)

Interacting with Others

Describe and implement strategies to value diversity in their communities. (<u>AC9HP6P05</u>) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



First Nations Games Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

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Sustainability

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General Capabilities

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Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



First Nations Seasons

Through hands-on exploration, students will investigate the significance of seasonal changes as they relate to First Nations peoples' connection to Country (land, sea, waterways). They will learn how seasonal indicators linked to weather, plant, animal, and environmental abundance, inform traditional practices and support access to food and resources for survival. Students will examine how First Nations peoples use traditional ecological knowledge to sustainably manage natural resources, and they will compare First Nations seasonal calendars with other cultural calendars to appreciate diverse perspectives and methods of communication.

Key Concepts:

- **Environment:** Understanding natural processes and their relationship to seasonal changes.
- **Country/Place:** Recognising the deep connection First Nations peoples have with their land, sea, and waterways.
- **Sustainability:** Learning about the use of natural resources, resources & sustainable practices informed by traditional ecological knowledge.
- **Traditional Knowledge:** Exploring the significance of seasonal indicators in First Nations cultures.
- **Cultural Perspectives:** Appreciating the diversity of seasonal calendars and cultural ways of knowing and communicating.

Curriculum Links

Year 3Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



First Nations Seasons Curriculum Links – Year 3

Biological Sciences

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (AC9S3U01)

Elaboration: Investigating how First Nations Australians understand and utilise the life cycles of certain species.

Physical Sciences

Identify sources of heat energy and examine how temperature changes when heat energy is transferred from one object to another (<u>AC9S3U03</u>)

Elaboration: Investigating how changes of state in materials used by First Nations Australians such as beeswax or resins are important for their use.

Earth and Physical Sciences Compare the observable properties of soils, rocks & minerals and investigate why they are important Earth resources. (AC9S3U02)

Elaboration: Investigating First Nations Australians' knowledges of different rock and mineral types, and how they were used for stone blades, grindstones & pigments.

Use & Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S3H02)

Elaboration: Recognising how First Nations Australians observe & describe developmental changes in plants & animals to make decisions about when to harvest certain resources.

Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

The representation of contemporary Australia as states and territories, and as the Countries/Places of First Nations Australians prior to colonisation. (AC9HS3K03) **Elaboration:** Compare the boundaries of Aboriginal Countries & Torres Strait Islander Places with the surveyed boundaries between Australian states & territories, to gain an appreciation of the different ways Australia can be represented.

Design & Technologies

Examine design and technologies occupations and factors including sustainability that impact on the design of products, services and environments to meet community needs. (<u>AC9TDE4K01</u>)

Elaboration: Exploring how many First nations Australians were & continue to be recognised for their specialist skill sin designing and producing products made from local material s& providing related services, using sustainable practices to ensure future access to meet community needs, for example, traditional adhesives.

Describe how forces & the properties of materials affect function in a product or system. (<u>AC9TDE4K02</u>)

Elaboration: Researching how First Nations Australians consider buoyant forces as they select materials for watercraft, for example making bark or dugout canoes. Describe the ways of producing food & fibre. (AC9TDE4K03)



Elaboration: Researching food & fibre production techniques & technologies developed by First nations Australians such as burning, tilling, planting, transplanting, watering, irrigating, weeding, thinning, cropping, storing & trading food.

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



First Nations Seasons Curriculum Links – Year 4

Biological Sciences

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Recognising how First Nations Australians perceive themselves as being an integral part of the environment.

Chemical Sciences

Examine the properties of natural & made materials including fibres, metals, glass & plastics and consider how these properties influence their use. (<u>AC9S4U04</u>)

Elaboration: Considering how First Nations Australians use materials for different purposes, such as tools, clothing & shelter, based on their properties.

Earth and Space Sciences

Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation. (<u>AC9S4U02</u>)

<u>History</u>

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (<u>AC9HS4K01</u>)

Elaboration: Exploring the connection of First Nations Australians to the land and water and how they manage these resources.

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent. (<u>AC9HS4K05</u>)

Elaborations: Explaining how people's connections with their environment can also be aesthetic, emotional and spiritual.

Exploring strategies to protect particular environments that provide habitats for animals; for example, planting bird-attracting vegetation.

Identifying the importance of water to the environment and to sustaining the lives of people and animals.

Sustainable use and management of renewable and non-renewable resources, including the custodial responsibility First Nations Australians have for Country/Place. (AC9HS4K06)

Design & Technologies

Examine design and technologies occupations and factors including sustainability that impact on the design of products, services and environments to meet community needs. (<u>AC9TDE4K01</u>)



Elaboration: Exploring how many First nations Australians were & continue to be recognised for their specialist skills in designing and producing products made from local materials & providing related services, using sustainable practices to ensure future access to meet community needs, for example, traditional adhesives.

Describe how forces & the properties of materials affect function in a product or system. (<u>AC9TDE4K02</u>)

Elaboration: Researching how First Nations Australians consider buoyant forces as they select materials for watercraft, for example making bark or dugout canoes.

Describe the ways of producing food & fibre. (AC9TDE4K03)

Elaboration: Researching food & fibre production techniques & technologies developed by First nations Australians such as burning, tilling, planting, transplanting, watering, irrigating, weeding, thinning, cropping, storing & trading food.

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



First Nations Seasons Curriculum Links – Year 5

Biological Sciences

Examine how particular structural features and behaviours of living things enable their survival in specific habitats.

(<u>AC9S5U01</u>)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Chemical Sciences

Explain observable properties of solids, liquids and gases by modelling the motion and arrangement of particles. (<u>AC9S5U04</u>)

Elaboration:

Recognising First Nations Australians' knowledges and understandings of solids, liquids & gases and how these knowledges are applied in a range of processes and practices, including the extraction of oils, medical therapies & cooking.

Science Inquiry

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (<u>AC9S5I01</u>)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things.

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management; for example, firestick farming.

The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences. (<u>AC9HS5K05</u>)

Elaboration: Exploring how environments are used and managed, such as the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks.

Economics & Business:

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (<u>AC9HS5K08</u>)

Elaboration: Distinguishing between needs and wants, and how resources might be used more sustainably to meet these needs and wants into the future.

Design & Technologies

Explain how people in Design & Technologies occupations consider competing factors including sustainability in the design of products, services & environments. (AC9TDE6K01) **Elaboration:** Investigating how First Nations Australians have long considered competing factors especially those related to sustainability in the design of harvesting technologies. Explain how and why food & fibre are produced in managed environments. (AC9TDE6K03)





Inspiring Minds for a Sustainable Future

Elaboration: Exploring how before colonisation, First Nations Australians lived in discrete communities that cared for, protected & sustainably harvested food & fibre resources, some of which are now cultivated to meet domestic & international demand, for example bunya nuts, macadamia & finger limes.

Explain how characteristics & properties of materials, systems, components, tools & equipment affect their use when producing designed solutions. (AC9TDE6K05) **Elaboration:** Investigating how First Nations Australians have long used material science knowledge to identify materials & preparation techniques to meet performance needs, for example twining techniques of string & rope fibres to ensure suitability for use in wet, dry, freshwater & saltwater applications.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



First Nations Seasons Curriculum Links – Year 6

Biological Sciences

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. <u>(AC9S6U01)</u>

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Chemical Sciences

Compare reversible changes, including dissolving & changes of state, and irreversible changes, including cooking & rusting that produce new substances. (<u>AC9S6U04</u>)

Elaboration: Investigating First Nations Australians' knowledges of reversible processes such as the application of adhesives & of irreversible process such as the use of fuels for torches.

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Elaborations: Investigate how contemporary restorative ecology adapts and builds on the traditional ecological knowledges of First Nations Australians.

Examining why ecologists collaborate with engineers & computer scientists to develop remote sensing techniques, identify patterns in habitat change & make predictions.

Design & Technologies

Explain how people in Design & Technologies occupations consider competing factors including sustainability in the design of products, services & environments. (AC9TDE6K01)

Elaboration: Investigating how First Nations Australians have long considered competing factors especially those related to sustainability in the design of harvesting technologies. Explain how and why food & fibre are produced in managed environments. (AC9TDE6K03)

Elaboration: Exploring how before colonisation, First Nations Australians lived in discrete communities that cared for, protected & sustainably harvested food & fibre resources, some of which are now cultivated to meet domestic & international demand, for example bunya nuts, macadamia & finger limes.

Explain how characteristics & properties of materials, systems, components, tools & equipment affect their use when producing designed solutions. (<u>AC9TDE6K05</u>)

Elaboration: Investigating how First Nations Australians have long used material science knowledge to identify materials & preparation techniques to meet performance needs, for example twining techniques of string & rope fibres to ensure suitability for use in wet, dry, freshwater & saltwater applications.

Health & Physical Education Making Active Choices



Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (AC9HP6M05)

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (AC9HP6P10)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. Interacting with Others

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) Elaboration: Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.

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First Nations Seasons Cross Curriculum Priorities & General Capabilities **Cross Curriculum Priorities**

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



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Inspiring Minds for a Sustainable Future

Forest Ecology Walk

Forest ecology walks provide students with an immersive, hands-on learning experience focused on understanding natural environments and ecosystems. Through observation and exploration, students will investigate the relationships between plants, animals, and their habitats. They will engage with biological concepts, including life cycles, survival strategies, and ecological interactions such as food chains. Students will also develop an appreciation for traditional knowledge systems and cultural significance of Country to First Nations peoples; recognising how cultural narratives and sustainable land management practices can support biodiversity. Additionally, the program highlights the importance of healthy ecosystems, conservation practices, and the role of humans in maintaining these environments through active custodianship.

Key Concepts:

- **Ecosystem Interactions:** Investigate the characteristics of ecosystems and the relationships between living organisms and their environments.
- **Food Chains:** Understand the roles of consumers, producers, and decomposers, and ecosystem interconnectedness.
- **Survival Features:** Examine life cycles and how features of plants and animals support their survival in specific habitats.
- **Connection to Country:** Explore First Nations histories, cultures, traditional knowledge systems and ways of connecting to and caring for Country; including sustainable land management practices.
- Environmental Management: Examine how environments are managed and shaped by human activity and importance of conservation, sustainable practices and environmental custodianship.

Curriculum Links

Year 3Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



Forest Ecology Walk Curriculum Links – Year 3

Biological Sciences

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (AC9S3U01)

Elaboration: Investigating how First Nations Australians understand and utilise the life cycles of certain species.

Geography

The ways First Nations Australians in different parts of Australia are interconnected with Country/Place. (<u>AC9HS3K04</u>)

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Forest Ecology Walk Curriculum Links – Year 4

Biological Sciences

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Recognising how First Nations Australians perceive themselves as being an integral part of the environment.

Earth and Space Sciences

Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation. (AC9S4U02)

History

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (<u>AC9HS4K01</u>)

Elaboration: Exploring the connection of First Nations Australians to the land and water and how they manage these resources.

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent. (<u>AC9HS4K05</u>)

Elaborations: Explaining how people's connections with their environment can also be aesthetic, emotional and spiritual.

Exploring strategies to protect particular environments that provide habitats for animals; for example, planting bird-attracting vegetation.

Identifying the importance of water to the environment and to sustaining the lives of people and animals.

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)



Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Forest Ecology Walk Curriculum Links – Year 5

Biological Sciences

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (AC9S5U01)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Science Inquiry

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (AC9S5I01)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things.

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management; for example, firestick farming.

The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences. (<u>AC9HS5K05</u>)

Elaboration: Exploring how environments are used and managed, such as the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks.

Economics & Business

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (AC9HS5K08)

Elaboration: Distinguishing between needs and wants, and how resources might be used more sustainably to meet these needs and wants into the future.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.

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Inspiring Minds for a Sustainable Future

Forest Ecology Walk Curriculum Links – Year 6

Biological Sciences

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. <u>(AC9S6U01)</u>

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Elaborations: Investigate how contemporary restorative ecology adapts and builds on the traditional ecological knowledges of First Nations Australians.

Examining why ecologists collaborate with engineers & computer scientists to develop remote sensing techniques, identify patterns in habitat change & make predictions.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (<u>AC9HP6P05</u>) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Forest Ecology Walk Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Insect Biodiversity

In this program, students will engage in an exploration of the biodiversity present in bush areas and native gardens, with a particular focus on invertebrates. Through hands-on activities, students will collect and identify a variety of invertebrates, employing dichotomous keys to aid in their identification. This process will enhance their observational skills and understanding of unique characteristics among different species. As students investigate the physical conditions of their chosen environment, they will learn to articulate the essential requirements for the living organisms that inhabit these areas. The use of scientific equipment, such as magnifying glasses, viewers, and microscopes, will facilitate detailed observations, allowing students to describe and appreciate the diverse range of organisms in bushland settings. Extension activities may involve analysing professionally collected specimens, where students will apply age-appropriate dichotomous keys to identify and classify these specimens. This program not only fosters scientific inquiry and observation but also promotes an appreciation for biodiversity, First Nations perspectives and the interconnectedness of life in our natural environment.

Key Concepts:

- **Biodiversity & Ecosystems** Interactions between diverse living organisms and ecosystems.
- Life Cycles, Growth and Survival Unique features of species, habitat requirements, environmental conditions for survival.
- Scientific Inquiry Collection, observation, identification and classification skills.
- Health & Safety Behaviours that optimise safe & ethical interaction with living organisms.

Curriculum Links

Year 3Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



Insect Biodiversity Curriculum Links – Year 3

Science Understanding

Biological Science

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (AC9S3U01)

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S3H02)

Science Inquiry

Questioning and Predicting

Pose questions to explore observed patterns and relationships & make predictions based on observations. (<u>AC9S3I01</u>)

Planning and Conducting

Follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate. (<u>AC9S3I03</u>)

Evaluating

Compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions. (<u>AC9S3I05</u>)

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Insect Biodiversity Curriculum Links – Year 4

Science Understanding

Biological Science

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S4H02)

Science Inquiry

Questioning and Predicting

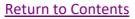
Pose questions to explore observed patterns & relationships and make predictions based on observations. (AC9S4I01)

Planning and Conducting

Follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate. (<u>AC9S4I03</u>)

Evaluating

Compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions. (AC9S4I05)





Insect Biodiversity Curriculum Links – Year 5

Science Understanding

Biological Science

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (AC955U01)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S5H02</u>)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns & test relationships and make reasoned predictions. (AC9S5I01)

Planning and Conducting

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S5I03</u>)

Evaluating

Compare methods and findings with those of others, recognise possible sources of error, pose questions for further investigation and select evidence to draw reasoned conclusions. (AC9S5105)



Insect Biodiversity Curriculum Links – Year 6

Science Understanding

Biological Science

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. <u>(AC9S6U01)</u>

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S6H02</u>)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns & test relationships and make reasoned predictions. (AC9S6I01)

Planning and Conducting

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S6I03</u>)

Evaluating

Compare methods and findings with those of others, recognise possible sources of error, pose questions for further investigation and select evidence to draw reasoned conclusions. (<u>AC9S6I05</u>)



Insect Biodiversity Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Soil Life

Students will explore the characteristics of living and non-living things, comparing the life cycles of plants and animals, while investigating the rich ecosystems beneath the ground. Through hands-on activities such as examining compost samples and observing organisms like worms and insects, students will deepen their understanding of the symbiotic relationships within ecosystems. They will also explore how humans rely on healthy soils for growing food, providing habitats, and purifying water. Using scientific equipment such as magnifying glasses and microscopes, students will observe and describe living organisms, as well as the decomposition process that transforms decaying matter into nutrient-rich soil, an essential Earth resource for sustainability. Through inquiry-based learning, students will follow procedures to make and record observations, conduct investigations, and compare their findings with others. They will evaluate the validity of their investigations, draw conclusions, and use scientific explanations to solve real-world problems, highlighting the critical role of science in meeting human needs and supporting environmental custodianship.

Key Concepts:

- Living and Non-living Things: Explore their characteristics and life cycles.
- Ecosystem Relationships: Investigate interactions within ecosystems.
- Soil Health: Understand the role of soil, compost, and decomposition.
- Human Dependence: Examine reliance on soil for food and water health.
- Scientific Skills: Develop observation and problem-solving skills.
- Environmental Custodianship: Emphasise the importance of sustainability now and into the future.

Curriculum Links

Year 3Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



Science Understanding

Biological Science

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (AC9S3U01)

Earth and Space Sciences Compare the observable properties of soils, rocks and minerals and investigate why they are important Earth resources. (<u>AC9S3U02</u>)

Elaborations: Examining different soils from local areas and using magnifying glasses to observe their components, such as plant matter as well as living things such as earthworms and insects.

Describing ways in which living things including humans depend on soils, such as for food, growing plants, providing habitat for organisms, and holding and cleaning water.

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S3H02)

Science Inquiry

Questioning and Predicting

Pose questions to explore observed patterns and relationships & make predictions based on observations. (<u>AC9S3I01</u>)

Planning and Conducting

Follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate. (AC9S3I03)

Evaluating

Compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions. (<u>AC9S3I05</u>)



Science Understanding

Biological Science

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Science as Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S4H02)

Science Inquiry

Questioning and Predicting

Pose questions to explore observed patterns & relationships and make predictions based on observations. (<u>AC9S4I01</u>)

Planning and Conducting

Follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate. (<u>AC9S4I03</u>)

Evaluating

Compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions. <u>AC9S4I05</u>



Science Understanding

Biological Science

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (AC955U01)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S5H02</u>)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns & test relationships and make reasoned predictions. (AC9S5I01)

Planning and Conducting

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S5I03</u>)

Evaluating

Compare methods and findings with those of others, recognise possible sources of error, pose questions for further investigation and select evidence to draw reasoned conclusions. (AC9S5105)



Science Understanding

Biological Science

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. (AC956U01)

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Science as Human Endeavour

Use & Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (<u>AC9S6H02</u>)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns & test relationships and make reasoned predictions. (<u>AC9S6I01</u>)

Planning and Conducting

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S6I03</u>)

Evaluating

Compare methods and findings with those of others, recognise possible sources of error, pose questions for further investigation and select evidence to draw reasoned conclusions. (<u>AC9S6I05</u>)



Soil Life Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Solar Boat Challenge

The Solar Boat Challenge engages students in developing scientific inquiry skills by building, testing, and refining boat designs. Through manipulating variables systematically, students learn how adjusting one factor at a time enhances performance. The challenge introduces students to scientific concepts, including buoyancy, hydrodynamics, electrical circuits, and solar energy, with opportunities to explore the principles of forces, energy transformation, and propulsion. The culminating boat race allows students to analyse their results, compare findings, and draw conclusions about the most effective scientific approaches used in their designs. The program aligns with science content areas such as energy transfer, electrical circuits, and the role of collaboration in science, as well as design technologies concepts like sustainability, material properties, and engineering systems.

Key Concepts:

- Scientific Testing & Inquiry: Developing and testing ideas through experiments and observations to improve designs.
- Forces: Exploring how different forces (e.g., thrust, drag, buoyancy) act on objects in water.
- **Energy:** Investigating energy transformation from solar to electrical energy to mechanical movement.
- **Solar Electricity:** Harnessing sunlight to generate power for the boat's propulsion.
- Electrical Circuits: Building and wiring circuits to transfer energy efficiently.
- **Buoyancy:** Understanding how objects float or sink based on their density and shape.
- Hydrodynamics: Examining water flow around objects to reduce resistance and improve speed.
- **Propulsion:** Generating movement through mechanical force, such as a motor-driven propeller.

Curriculum Links

<u>Year 5</u> <u>Year 6</u> <u>Cross Curriculum Priorities/General Capabilities</u>



Solar Boat Curriculum Links – Year 5

Design Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments (<u>AC9TDE6K01</u>) Technologies Context: Engineering Principles and Systems

Technologies Context: Engineering Principles and Systems

Explain how electrical energy can be transformed into movement, sound or light in a product or system. (AC9TDE6K02)

Materials and Technologies Specialisations

Explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions. (<u>AC9TDE6K05</u>)

Investigating and Defining

Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions. (<u>AC9TDE6P01</u>)

Evaluating

Negotiate design criteria including sustainability to evaluate design ideas, processes and solutions. (AC9TDE6P04)



Solar Boat Curriculum Links – Year 6

Science Knowledge & Understanding

Physical Sciences

Investigate the transfer and transformation of energy in electrical circuits, including the role of circuit components, insulators and conductors. (AC9S6U03)

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Use and Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (AC9S6H02)

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns and test relationships and make reasoned predictions. (<u>AC9S6I01</u>)

Planning and Conducting

Plan and conduct repeatable investigations to answer questions including, as appropriate, deciding the variables to be changed, measured and controlled in fair tests; describing potential risks; planning for the safe use of equipment and materials; and identifying required permissions to conduct investigations on Country/Place. (AC9S6I02)

Use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (<u>AC9S6I03</u>)

Evaluating

Compare methods and findings with those of others, recognize possible sources of error, post questions for further investigation and select evidence to draw reasoned conclusions. (AC9S6105)

Design Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments (<u>AC9TDE6K01</u>)

Technologies Context: Engineering Principles and Systems

Explain how electrical energy can be transformed into movement, sound or light in a product or system. (AC9TDE6K02)

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Explain how characteristics and properties of materials, systems, components, tools and equipment affect their use when producing designed solutions. (<u>AC9TDE6K05</u>)

Investigating and Defining

Investigate needs or opportunities for designing, and the materials, components, tools, equipment and processes needed to create designed solutions. (<u>AC9TDE6P01</u>)

Evaluating

Negotiate design criteria including sustainability to evaluate design ideas, processes and solutions. (AC9TDE6P04)





Solar Boat Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Springbrook Ecology Walks

Springbrook National Park, a World Heritage-listed area, showcases stunning geological formations and diverse ecosystems. This park is vital for understanding Earth's evolutionary history and ongoing geological processes. It is home to approximately 250 native animal species, including many threatened species, within its cool rainforests, eucalyptus forests, and montane heath. As part of a large shield volcano from 23 million years ago, the Springbrook Plateau plays a crucial role in the water catchment for the Little Nerang and Hinze dams, providing drinking water to the Gold Coast and surrounding rural areas. Through immersive exploration of these environments, students will learn about the interrelationships between living organisms and their habitats, while gaining insights into First Nations histories, traditional knowledge systems and cultural significance of Country. Learning goals can be tailored to specific classroom concepts being studied. Students will recognise the importance of maintaining healthy ecosystems for all life forms and consider how these places can be conserved and cared for through active custodianship.

Note: An evening walk can be facilitated to explore glow worms and nocturnal activity at Natural Bridge for overnight camp groups.

Key Concepts:

- **Geological Features:** Investigate the geological history of the Springbrook Plateau, including volcanic activity and erosion that formed the region's landscapes and continues to shape biodiversity of current ecosystems.
- **Ecosystem Interactions:** Explore the characteristics of ecosystems and relationships among organisms, including how geological features influence habitat types and the distribution of species.
- **Survival Features:** Examine life cycles and adaptations of plants and animals; highlighting features that enable survival in specific habitats.
- **Connection to Country:** Explore First Nations histories and cultures in relation to this area, investigating traditional ecological knowledge and sustainable land management practices.
- Environmental Management: Investigate the impact of human activities on ecosystems and emphasise the importance of conservation, sustainable practices, and custodianship of the environment.

Curriculum Links

Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities





Springbrook Ecology Walk Curriculum Links – Year 4

Biological Sciences

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Recognising how First Nations Australians perceive themselves as being an integral part of the environment.

Earth and Space Sciences

Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation. (AC9S4U02)

Elaborations: Identifying local water sources and exploring how they change over time. Exploring First Nations Australians' connections with and valuing of water and water resource management.

Considering why we are encouraged to save and recycle water, and actions people can take to reduce water consumption and waste.

<u>History</u>

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (<u>AC9HS4K01</u>)

Elaboration: Exploring the connection of First Nations Australians to the land and water and how they manage these resources.

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent. (<u>AC9HS4K05</u>)

Elaborations: Explaining how people's connections with their environment can also be aesthetic, emotional and spiritual.

Exploring strategies to protect particular environments that provide habitats for animals; for example, planting bird-attracting vegetation.

Identifying the importance of water to the environment and to sustaining the lives of people and animals.

Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.



Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Springbrook Ecology Walk Curriculum Links – Year 5

Biological Sciences

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (<u>AC9S5U01</u>)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Earth and Space Sciences

Describe how weathering, erosion, transportation and deposition cause slow or rapid change to Earth's surface. (<u>AC9S5U02</u>)

Elaborations: Identifying types of weathering caused by mechanical means such as by wind abrasion, cycles of extreme heat or cold, and frost wedging; and biological means as by plants & tree roots.

Exploring how erosion can be caused by moving air or moving water and how substances such as surface soil are relocated, and identifying examples of erosion on a local or regional scale. Analysing the difference between weathering and erosion and comparing the timescales over which these processes can occur.

Investigating how humans have changed local landscapes and predicting the effect these changes might have on rates of erosion.

Science Inquiry

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (<u>AC9S5I01</u>)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things.

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management; for example, firestick farming.

The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences. (<u>AC9HS5K05</u>)

Elaboration: Exploring how environments are used and managed, such as the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks.

Economics & Business

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (<u>AC9HS5K08</u>)

Elaboration: Distinguishing between needs and wants, and how resources might be used more sustainably to meet these needs and wants into the future.

Health & Physical Education Making Active Choices



Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Springbrook Ecology Walk Curriculum Links – Year 6

Biological Sciences

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. <u>(AC9S6U01)</u>

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Chemical Sciences

Compare reversible changes, including dissolving and changes of state, and irreversible changes, including cooking & rusting that produce new substances. (AC9S6U04) **Elaboration:** Examining the substances produced in cooking & rusting & comparing them with the original substances.

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Elaborations: Investigate how contemporary restorative ecology adapts and builds on the traditional ecological knowledges of First Nations Australians.

Examining why ecologists collaborate with engineers & computer scientists to develop remote sensing techniques, identify patterns in habitat change & make predictions.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>)

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (AC9HP6P10)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Springbrook Ecology Walk Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Sustainability Challenge

The Sustainability Challenge activity invites students to explore and consolidate their understanding of sustainable attitudes and actions through engaging, hands-on experiences. Students investigate the school environment, identifying examples of sustainability in areas such as waste management, biodiversity, water conservation, and energy use. This activity incorporates First Nations cultural perspectives, promoting understanding of traditional ecological knowledge, sustainability practices and custodial responsibilities in caring for Country. Throughout the challenge, students communicate their findings and learn practical ways to implement sustainable practices at home and in their school community, fostering community engagement and critical thinking about the importance of sustainability and the role of individuals in caring for the environment.

Key Concepts:

- **Sustainability:** Raising awareness of Sustainable Development Goals (SDGs) and understanding the balance of environmental, social, and economic needs for present and future generations (locally & globally).
- **Renewable Resources:** Resources that can be replenished naturally, such as solar energy and wind power.
- **Human Impacts:** The effects of human activities on the environment, including production, consumption & habitat destruction.
- **Waste:** Analysing waste production and management, focusing on reduction, reuse, repurposing and recycling practices.
- **Care & Custodianship:** Considering First Nations cultural perspectives & practices & exploring ways to champion sustainability in action.

Curriculum Links

Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities



Sustainability Challenge Curriculum Links – Year 4

Science as a Human Endeavour

Use and Influence of Science

Consider how people use scientific explanations to meet a need or solve a problem. (AC9S4H02)

Geography

The importance of environments, including natural vegetation and water sources, to animals and people in Australia and on another continent. (AC9HS4K05)

Sustainable use and management of renewable and non-renewable resources, including the custodial responsibility First Nations Australians have for Country/Place. (AC9HS4K06)

HASS Skills

Questioning and Researching

Locate, collect and record information and data from a range of sources, including annotated timelines and maps. (<u>AC9HS4S02</u>)

Concluding and Decision making

Propose actions or responses to an issue or challenge that consider possible effects of actions. (<u>AC9HS4S06</u>)

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Sustainability Challenge Curriculum Links – Year 5

Science as a Human Endeavour

Use and Influence of Science

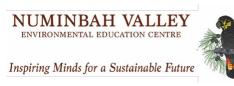
Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (AC9S5H02)

Economics and Business

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (<u>AC9HS5K08</u>)

HASS Skills

Conclusion and decision making to develop evidence-based conclusions. (<u>AC9HS5S05</u>) Propose actions or responses to issues or challenges and use criteria to assess the possible effects. (<u>AC9HS5S06</u>)



Sustainability Challenge Curriculum Links – Year 6

Science Understanding

Physical Sciences

Investigate the transfer and transformation of energy in electrical circuits, including the role of circuit components, insulators and conductors. (<u>AC9S6U03</u>)

Science as a Human Endeavour

Use and Influence of Science

Investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions. (AC9S6H02)

Economics and Business

Influences on consumer choices and strategies that can be used to help make informed personal consumer and financial choices. (<u>AC9HS6K08</u>)

HASS Skills

Interpreting, Analysing and Evaluating

Evaluate primary and secondary sources to determine origin, purpose and perspectives. (AC9HS6S04)

Concluding and Decision-making

Propose actions or responses to issues or challenges and use criteria to assess the possible effects. (AC9HS6S06)

Design and Technologies

Technologies and Society

Explain how people in design and technologies occupations consider competing factors including sustainability in the design of products, services and environments. (<u>AC9TDE6K01</u>)



Sustainability Challenge Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

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Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

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Team Building Games

Students participate in a variety of challenging, themed activities designed to test their problem-solving, creative thinking, and teamwork skills. Each activity requires students to collaborate in an inclusive & supportive manner, communicate effectively & demonstrate leadership. A range of solutions exist for each challenge, which can be differentiated as required. The ultimate challenge lies in whether each group can work together, leveraging individual strengths, to trial & find solutions for each activity before time runs out!

Key Concepts:

- **Movement Skills:** Refining and adapting movement strategies in unpredictable outdoor situations.
- **Problem Solving:** Applying creative thinking to movement challenges, using communication, negotiation and problem-solving skills.
- **Participation & Wellbeing:** Participate in physical activities that enhance health and wellbeing in natural and outdoor settings.
- Health & Safety: Investigating supportive behaviours that contribute to safety and wellbeing including collaboration, teamwork & leadership.

Curriculum Links

Year 4 Years 5 & 6 Cross Curriculum Priorities/General Capabilities



Team Building Curriculum Links – Year 4

Health & Physical Education

Moving our bodies

Refine and apply fundamental movement skills in new movement situations. (<u>AC9HP4M01</u>) Apply and adapt movement strategies to achieve movement outcomes. (<u>AC9HP4M02</u>) Demonstrate how movement concepts related to effort, space, time, objects and people can be applied when performing movement sequences.(<u>AC9HP4M03</u>)

Learning through Movement

Apply creative thinking when designing movement sequences and solving movement problems. (<u>AC9HP4M07</u>)

Elaboration: Drawing on prior knowledge from other physical activity experiences to solve challenges faced when participating in outdoor activities.

Perform a range of roles in respectful ways to achieve successful outcomes in group or team movement activities. (<u>AC9HP4M09</u>)

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing.

(<u>AC9HP4P10</u>)

Interacting with Others

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)



Team Building Curriculum Links – Years 5 & 6

Health & Physical Education

Moving our bodies

Adapt and modify movement skills across a variety of situations. (<u>AC9HP6M01</u>) Transfer familiar movement strategies to different movement situations. (<u>AC9HP6M02</u>) Investigate how different movement concepts related to effort, space, time, objects and people can be applied to improve movement outcomes.(<u>AC9HP6M03</u>)

Learning through Movement

Predict and test the effectiveness of applying different skills and strategies in a range of movement situations. (<u>AC9HP6M07</u>)

Elaboration: Adapting movement skills and strategies from other contexts to generate creative solutions to unfamiliar movement challenges when participating in outdoor activities. Participate positively in groups and teams by contributing to group activities, encouraging others and negotiating roles and responsibilities (<u>AC9HP6M09</u>)

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>)

Making Healthy & Safe Choices

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing.

Interacting with Others

Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (<u>AC9HP6P04</u>)



Team Building Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

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General Capabilities

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Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

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Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.



Water Cycle & Freshwater Studies

Students will explore the water cycle and its critical processes, including evaporation, condensation, and precipitation, with a focus on how rainfall in the upper catchment flows down into local creeks and waterways, including dam storage; supplying drinking water for the local community. They will collect water samples and identify water bugs (macroinvertebrates) using scientific equipment. Students will analyse abundance of species and sensitivity levels to help evaluate water quality. To corroborate findings, they will also conduct physical water quality testing to get data on turbidity, temperature and dissolved oxygen levels and make observations about presence of native plant species and evidence of disturbance along the riparian corridor. These indicators help determine the overall health the catchment. Through collaborative discussions, students will identify human behaviours that impact water quality and propose actionable steps they can take to maintain and improve catchment health.

Key Concepts:

- Water Cycle: Understanding the key processes of evaporation, condensation, and precipitation that sustain freshwater ecosystems and the flow of water from the upper catchment to local waterways.
- Water Quality & Catchment Health: Recognising the importance of clean water for both ecosystems and human health, with an emphasis on physical indicators such as turbidity, temperature & dissolved oxygen levels to assess the health of local waterways.
- **Freshwater Biodiversity:** Identifying the role of macroinvertebrates as bioindicators of water health and understanding their adaptations for survival in freshwater environments.
- **Basic Needs & Habitats:** Exploring the essential requirements for living organisms, including water, food, and shelter, and how these needs influence their adaptations and habitats.
- **Classification:** Learning to classify organisms & essential requirements, fostering an understanding of habitats, biodiversity & ecosystem dynamics.

Curriculum Links

Year 4Year 5Year 6Cross Curriculum Priorities/General Capabilities





Water Cycle & Freshwater Studies Curriculum Links – Year 4

Biological Sciences

Explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships. (AC9S4U01)

Elaborations: Describing how animals, including humans, obtain their food from plants and other animals.

Representing feeding relationships of producers and consumers as a food chain and comparing food chains across different habitats.

Recognising how First Nations Australians perceive themselves as being an integral part of the environment.

Earth and Space Sciences

Identify sources of water and describe key processes in the water cycle, including movement of water through the sky, landscape and ocean; precipitation; evaporation; and condensation. (AC9S4U02)

Elaborations: Identifying local water sources and exploring how they change over time.

Exploring First Nations Australians' connections with and valuing of water and water resource management.

Considering why we are encouraged to save and recycle water, and actions people can take to reduce water consumption and waste.

Science Inquiry

Questioning and Predicting

Pose questions to explore observed patterns and relationships and make predictions based on observations. (<u>AC9S4I01</u>)

Planning and Conducting

Use provided scaffolds to plan and conduct investigations to answer questions or test predictions, including identifying the elements of fair tests, and considering the safe use of materials and equipment. (AC9S4I02)

History

The diversity of First Nations Australians, their social organisation and their continuous connection to Country/Place. (<u>AC9HS4K01</u>)

Elaboration: Exploring the connection of First Nations Australians to the land and water and how they manage these resources.

Geography

The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent. (<u>AC9HS4K05</u>)

Elaborations: Explaining how people's connections with their environment can also be aesthetic, emotional and spiritual.

Exploring strategies to protect particular environments that provide habitats for animals; for example, planting bird-attracting vegetation.

Identifying the importance of water to the environment and to sustaining the lives of people and animals.



Health & Physical Education

Making Active Choices

Participate in physical activities in natural and outdoor settings to examine factors that can influence their own and others' participation. (<u>AC9HP4M05</u>)

Making Healthy & Safe Choices

Investigate and apply behaviours that contribute to their own and others' health, safety, relationships and wellbeing. (<u>AC9HP4P10</u>)

Elaborations: Discussing the importance of a sense of belonging & connection in promoting mental health & wellbeing.

Identifying ways they can change their behaviours to support the sustainability of the Earth's systems.

Interacting with Others

Describe how valuing diversity influences wellbeing and identify actions that promote inclusion in their communities. (<u>AC9HP4P05</u>)

Elaboration: Recognising the important role of cultural narratives in describing the diversity, sharing beliefs and practices of First Nations communities.

Select, use and refine personal and social skills to establish, manage and strengthen relationships. (<u>AC9HP4P04</u>)

Elaboration: Discussing how demonstrating respect and empathy for First Nations Australians can build positive relationships.



Water Cycle & Freshwater Studies Curriculum Links – Year 5

Biological Sciences

Examine how particular structural features and behaviours of living things enable their survival in specific habitats. (<u>AC9S5U01</u>)

Elaboration: Identify physical and behavioural characteristics that enable a plant or animal to survive.

Earth and Space Sciences

Describe how weathering, erosion, transportation and deposition cause slow or rapid change to Earth's surface. (AC9S5U02)

Elaborations: Identifying types of weathering caused by mechanical means such as by wind abrasion, cycles of extreme heat or cold, and frost wedging; and biological means as by plants & tree roots.

Exploring how erosion can be caused by moving air or moving water and how substances such as surface soil are relocated, and identifying examples of erosion on a local or regional scale. Analysing the difference between weathering and erosion and comparing the timescales over which these processes can occur.

Investigating how humans have changed local landscapes and predicting the effect these changes might have on rates of erosion.

Science Inquiry

Questioning and Predicting

Pose investigable questions to identify patterns & test relationships & make reasonable predictions. (AC9S5I01)

Elaboration: Acknowledging & using information from First Nations Australians to guide the formulation of investigable questions about structural features & behaviours of living things. **Planning and Conducting**

Plan and conduct repeatable investigations to answer questions, including, as appropriate, deciding the variables to be changed, measured and controlled in fair tests; describing potential risks; planning for the safe use of equipment and materials; and identifying required permissions to conduct investigations on Country/Place. (AC9S5I02)

Geography

The influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. (<u>AC9HS5K04</u>)

Elaboration: Identifying how First Nations Australian communities altered the environment and sustained ways of living through their methods of land and resource management. The management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences. (AC9HS5K05) **Elaboration:** Exploring how environments are used and managed, such as the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks.



Economics & Business

Types of resources, including natural, human and capital, and how they satisfy needs and wants. (AC9HS5K08)

Elaboration: Distinguishing between needs and wants, and how resources might be used more sustainably to meet these needs and wants into the future.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (AC9HP6P10)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Water Cycle & Freshwater Studies Curriculum Links – Year 6

Biological Sciences

Investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions. <u>(AC9S6U01)</u>

Elaborations: Identifying the physical conditions in an aquatic or terrestrial habitat and how they change over time.

Investigating First Nations Australians' knowledges and understandings of the physical conditions necessary for the survival of certain plants and animals.

Science as a Human Endeavour

Nature and Development of Science

Examine why advances in Science are often the result of collaboration or build on the work of others. (<u>AC9S6H01</u>)

Elaborations: Investigate how contemporary restorative ecology adapts and builds on the traditional ecological knowledges of First Nations Australians.

Examining why ecologists collaborate with engineers & computer scientists to develop remote sensing techniques, identify patterns in habitat change & make predictions.

Health & Physical Education

Making Active Choices

Participate in physical activities that enhance health and wellbeing in natural and outdoor settings, and analyse the steps and resources needed to promote participation. (<u>AC9HP6M05</u>) **Making Healthy & Safe Choices**

Analyse how behaviours influence the health, safety, relationships and wellbeing of individuals and communities. (<u>AC9HP6P10</u>)

Elaboration: Describing strategies to support a sense of belonging & connection, and recognising the importance of social support for enhancing mental health & wellbeing. **Interacting with Others**

Describe and implement strategies to value diversity in their communities. (AC9HP6P05) **Elaboration:** Exploring the importance of cultural expressions of First Nations Australians in maintaining a continuing deep connection to Country/Place & its influence on wellbeing. Describe and demonstrate how respect and empathy can be expressed to positively influence relationships. (AC9HP6P04)

Elaboration: Recognising how words & labels used regarding First Nations Australians can cause offence and how this awareness can support & strengthen respectful relationships.



Water Cycle & Freshwater Studies Cross Curriculum Priorities & General Capabilities

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures

First Nations communities of Australia maintain a deep connection to, and responsibility for, Country/Place and have holistic values and belief systems that are connected to the land, sea, sky and waterways. (A TSICP1)

First Nations Australians' ways of life reflect unique ways of being, knowing, thinking and doing. (A TSIC2)

The significant and ongoing contributions of First Nations Australians and their histories and cultures are acknowledged locally, nationally and globally. (A TSIP3)

The First Peoples of Australia belong to the world's oldest continuous cultures. First Nations Australians demonstrate resilience in the maintenance, practice and revitalisation of culture and continue to celebrate and share the past, present and future manifestations of their cultures. (A TSIC3)

Sustainability

All life forms, including human life, are connected through Earth's systems (geosphere, biosphere, hydrosphere and atmosphere) on which they depend for their wellbeing and survival. (SS1)

Sustainable patterns of living require the responsible use of resources, maintenance of clean air, water and soils, and preservation or restoration of healthy environments. (SS2)

General Capabilities

Critical and Creative Thinking – Inquiring, Generating, Analysing, Reflecting.

Personal and Social Capabilities - Self-awareness, Self-management, Social awareness, Social management.

Intercultural Understanding - Reflect on the relationship between cultures and identities; Examine cultural perspectives and worldviews and explore the influence of cultures on interactions.

Ethical Understanding - Explore ethical concepts; Examine values, rights and responsibilities and ethical norms; Recognise influences on ethical behaviour and perspectives.

