

# Backyard Buddies

## local fauna and flora project

Eat Dirt, Reimagining education



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## **1. BACKGROUND**

### **1.1 INTRODUCTION**

#### **Project summary**

The Backyard Buddies project was a collaborative unit of work between Beauty Point Public School, National Parks and Wildlife Service, and the Foundation for National Parks and Wildlife, which is a non-government organisation on a mission to protect Australia's ecosystems and native species for generations to come.

This project-for-a-purpose was undertaken over 3 months by Year 4 students in 2016. It was a transdisciplinary, inquiry-based unit incorporating content from the following disciplines:

- Geography
- History
- Science and Technology
- Mathematics
- English
- Art

#### **School Context**

Beauty Point Public School is located in a magnificent position overlooking Middle Harbour and the Spit. It is an area renowned for its natural beauty and quality lifestyle. The 315 students enrolled at Beauty Point are drawn from an upper middle class socio-economic population base. The school's population includes a number of overseas students where the family has been relocated due to business. Beauty Point is well known for its high level of student achievement and the educational opportunities provided for the children.

Beauty Point Public School's Leader In Me program is geared towards developing 21st Century resilience and leadership skills in every student.

The 7 Habits are:

1. Be Proactive
2. Begin With The End in Mind
3. Put First Things First
4. Think Win-Win
5. Seek First to Understand, Then Listen
6. Synergise
7. Sharpen The Saw

These habits were developed by Dr Stephen Covey and focus on teaching students how to 'dream big', set goals, create achievable action plans and incorporate emotional intelligence and leadership diversity into their daily lives.

We seek to embed these strategies to improve the processes and culture at the school and this project linked the habits to not only our personal dealings in our lives but also to the business context.

The Backyard Buddies project provided an opportunity for students to use the 7 Habits and support our local environment. It was undertaken by Year 4 at Beauty Point Public School which included 53 students, including boys and girls.

## **1.2 Purpose**

The Backyard Buddies project is intended to enhance creative thinking, differentiated learning, gifted and talented strategies and student voice to increase learning engagement. The key concept is the inclusion of student voice, co-facilitation and co-collaboration at all stages of the project design.

### **Our Mission:**

- To empower the students at Beauty Point Public School to 'dream a future' that will improve their 'quality of life' in the school and wider community; and
- For our students to be proud of their contribution and legacy for the rest of their lives.

## **2. PROJECT FOR A PURPOSE**

The Backyard Buddies project started with a need from the National Parks and Wildlife Service. The interpretive signs around the walking trails in the local area were old, weathered and therefore in need of replacement. This provided students with an ideal opportunity to commence a project using the habit "Begin with the end in mind" and work backwards to determine the actions that would be required to meet the objective.

## **3. CLARIFYING THE NEED**

The Year 4 students initially had a discussion around "What is a consultant?" and examples of the types of work that consultants do. We then discussed how the National Parks and Wildlife Service would like us to be their consultants and will inform us of their requirements. We were then visited by the local Ranger from National Parks and Wildlife Service who presented the class with a consultant's brief and talked through the brief. This brief is attached as Appendix A.

The requirements of the class as contained in the brief were as follows:

1. Research the animals (fauna) and plants (flora) that are indigenous (native) to North Head.
2. Choose one and find some interesting facts. You may even choose to write a story.
3. Please also include the Latin name.
4. Research interpretive signs.
5. Design your sign – you might like to include a photograph and have the sign made in the shape of the plant or animal.
6. Provide your finished product to Ranger Mel who will get a quote.
7. As a class, write to Fairfax Publishing and tell them about your project. Ask them for additional funding to enable you to be even more creative. You might ask them to match you dollar for dollar. If you have \$14,000, how much will you ask for? Use your persuasive writing skills to do this. It might be a good idea to include some examples of what you have produced.

It was important at this stage to have a sample of pictures of interpretive signs to model to the students and discuss the features of these signs that make them most visually appealing and suitable for the purpose.

The visit by the “client” providing list of requirements at the outset of the task framed the project as problem-based. There was no single, prescribed outcome that they were trying to achieve, nor a scripted path that they had to take in order to arrive at their solution. Whilst there was a set of criteria that had to be complied with (for example the flora and fauna had to be native to the area), the solution to the problem was largely open-ended.

The key objectives at this phase of the project were to ensure that the students understood:

- The project was authentic, meaningful and has a real-world context. The NPWS were trusting us to “get the job done” and there was a genuine problem (replacing old and decrepit signage) that we needed to solve;
- The project was challenging. Students would not be merely provided questions in which lower-order responses were required – they would be formulating questions, researching and applying information.
- To a significant degree students would be making their own choices about how they approach the task and carry out their work. It was a creative project and there were many approaches in which the task could be completed.
- The students were excited by the fact that these signs would be a permanent fixture that they would be able to revisit for many years and this was motivation for them to expend their best effort in undertaking and completing this task.

#### **4. CONTINUOUS INQUIRY**

The Backyard Buddies project was dynamic, in hindsight perhaps more than was anticipated. However, it was stressed to students at the commencement of the project that the project would evolve as we progressed because there will be new ideas from both the client and ourselves which will cause us to rethink our approach. This was an important discussion so as to not make students feel that they had failed or wasted time when we reworked parts of the project or abandoned ideas altogether.

Two-way communication with the client was continuous. We had regular visits from Ranger Mel where we would provide updates of our work, seek feedback, and understand further requirements from the client. There was very productive discussion around the habit of “Seeking first to understand, then be understood” and how this is important in a commercial context in order to meet the needs of our client.

With requirements evolving throughout the project, students understood that learning is not always completing a defined checklist of tasks. They developed skills in creating their own questions, researching and communicating to find answers to their questions, and applying their findings in a way that will best achieve the overall requirement.

#### **5. MAKING THEIR WORK PUBLIC**

The importance of the students understanding that the signs would be displayed to the public was two-fold:

- Through an educational lens, ensuring students take their work seriously and reflect on their processes to improve the quality of their final product; and
- Through a product quality lens, as the final project deliverable will be on public display long-term and needs to be fit for the purpose.

With the final project deliverable being displayed so publicly, a combination of excitement and anxiety developed among the students. Excitement was a great motivator which increased focus and engagement with the task. Anxiety was carefully managed by the teachers through:

- Identifying students who may be feeling overwhelmed by the amount of work or feeling incapable of providing the level of quality that was expected; and
- Providing guiding questions, suggestions, scaffolding and examples of student work to these students to help them progress. Part of the differentiation of the task was that some students who progresses relatively quicker created templates which others used as a scaffold.

This small, carefully managed level of anxiety was not only tolerable but it was a natural effect and a productive tool in taking the work seriously, understanding the importance of what they were producing and producing their best work.

As part of the consultation process of sharing the progress of their work, a group of students were fortunate to be invited to present at the North Head Stakeholder Meeting which included attendees representing:

- The NSW Premier's Office
- The Australian Federal Police
- National Parks and Wildlife Services

At this meeting, the students not only showcased examples of their work but also explained and reflected on the process followed to reach the solution.

Making their work public allowed the students to show and explain what they can do, as opposed to receiving (and sometimes having to explain!) test scores. Students who don't necessarily shine in individual subject tests or assessments are provided an alternative way to demonstrate their capabilities and showcase a variety of skills (e.g. artistic, communication, technology).



## 6. BENEFITS OF THE PROJECT

- Each Year 4 student designed an interpretive sign of their flora or fauna item, including a hand-drawn picture and research. These were finalised by National Parks and Wildlife staff to ensure consistency and practicality of the final product. These signs will be displayed around a National Park in the area as well as a small sample of the signs being displayed around the school.
- The design of a public product led to the students reflecting on their learning as they see the result of their learning as others will see it.
- There were high levels of engagement with the task.
- Deep understanding of the content of the task.
- The project was technology-based, both information technology (as research, presentation and publishing tools) and design for a purpose.

- As a skills-based unit, the students developed proficiency in syllabus skills across a range of disciplines, for example:
- Geography: skills to acquire, process and communicate geographical information.
- Science and Technology: applies a design process and uses a range of tools, equipment, materials and techniques to produce solutions that address specific design criteria.
- Maths: inquiry, exploring and connecting mathematical concepts, choosing and applying problem-solving skills and mathematical techniques, communication and reasoning.
- English: communicate through speaking, listening, reading, writing, viewing and representing; use language to shape and make meaning according to purpose, audience and context; think in ways that are imaginative, creative, interpretive and critical; express themselves and their relationships with others and their world; learn and reflect on their learning through their study of English.
- Art: creating visually-appealing work with consideration of the audience for their works.
- Students strengthened communication skills through dealings with other students and stakeholders.
- Catered for a range of student strengths and learning styles.

## 7. PROJECT OVERVIEW – LEARNING AND ASSESSMENT

Learning quests	1	2	3	4	5	6	7	8	9	10	11	12	13
Assessment	Understand context	Understand task	Initial inquiry	Understand financial scale and persuade for funding	Spatial design of the signs	Formulate project plan	Identify original languages of the area	Understand physical scale of the walk	Understand text features for purpose	Appreciate and apply relevant artistic techniques	Research and gather information	Apply research	Communicate findings and reflect on process
	Verbal responses to questioning	Completeness and accuracy of students' meeting notes	Persuasive oral presentation to teachers	Formal assessment of their persuasive writing	Applying area concepts resulting in a practical design	Informal assessment of input into class discussion	Completion of accurate indigenous name of flora/fauna	Accuracy of estimation and calculation of length	Writing a well-structured and accurate informative text	Formative assessment, and quality control of final product	Continuous formative assessment and advice	Completion of their signs against the defined criteria	Reflection on their learning



## 8. APPENDIX A – NPWS consultant's brief

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### Harbour Area



**Memorandum**            **Fairfax Track Interpretation Strategy**

**To:**                        **Beauty Point Consultants – Year 4**

**From:**                    **Melanie Tyas - Ranger**

**Subject:**                 **Consultant's Brief for the Design of Interpretation Signage at the Fairfax Track – North Head, Sydney Harbour National Park**

### Consultant's Brief

<http://www.nationalparks.nsw.gov.au/things-to-do/walking-tracks/fairfax-walk>

**Rationale:** The NSW National Parks and Wildlife Service (NPWS) has a sum of \$14,000 to develop and implement an interpretation strategy for the Fairfax Walk at North Head. The Fairfax Track is a wheel chair accessible track - approximately 1km in length. It is appealing to children and families and provides a good introduction to bush walking. The NSW NPWS wants to use this track to showcase some of North Head's unique flora and fauna, so visitors to the area can learn about the area's biodiversity and know what to look out for. If this project is very successful there is an opportunity to roll it out into other areas of the park, such as Bradleys and Middle Heads.

**Objective:** Ranger Melanie Tyas is seeking Future Rangers - creative students to prepare an interpretation strategy for the Fairfax Walk, North Head, Sydney Harbour National Park. Your year has been chosen as you have proven to be highly creative in both art and English. The signs need to be appealing to young adults, such as yourselves, so they need to be colourful and interesting.

#### Specifications:

1. Your signs will be placed approx. 30cm off the ground on a 45 degree angle. Signs should ideally measure approximately 300 x 200mm.
2. They must be visually appealing (look good).
3. They must contain facts that both adults and children find interesting.

#### What you need to do:

1. Research the animals (fauna) and plants (flora) that are indigenous (native) to North Head.
2. Choose one and find some interesting facts. You may even choose to write a story.
3. Please also include the Latin name.
4. Research interpretive signs.
5. Design your sign – you might like to include a photograph and have the sign made in the shape of the plant or animal.
6. Provide your finished product to Ranger Mel who will get a quote.
7. As a class, write to Fairfax Publishing and tell them about your project. Ask them for additional funding to enable you to be even more creative. You might ask them to match you dollar for dollar. If you have \$14,000, how much will you ask for? Use your persuasive writing skills to do this. It might be a good idea to include some examples of what you have produced.

NSW  
NATIONAL  
PARKS AND  
WILDLIFE  
SERVICE

# Harbour Area



Examples of interpretive signs.



**NSW  
NATIONAL  
PARKS AND  
WILDLIFE  
SERVICE**

## **APPENDIX B – Unit Program**







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**The following pages outline the Backyard Buddies Unit Program designed by Brent Robens (Year 4 teacher, Beauty Point Public School).**










Summary	Duration
<p>Literacy (including visual) focused unit where the final deliverable is a brief but thoroughly planned and edited factual text. Persuasive texts/presentations are also encompassed.</p> <p>The geography and science strands of <i>The Earth's Environment</i> and <i>Living World</i> respectively provide the content focus.</p>	<p>Term 4 5 weeks Detail: 15 hours. 3 lessons per week for 5 weeks.</p>

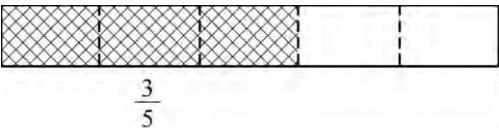
Unit overview	Enter your own title
<p>A project-based transdisciplinary unit in which the students act as consultants for the National Parks and Wildlife Service with the task of designing interpretive signs for flora and fauna in the local area. Interpretive signs provide factual information, by way of images and text, and are typically seen around nature walks and parklands.</p>	

Outcomes	Assessment overview
<p>English K-10</p> <ul style="list-style-type: none"> <li>› EN2-1A communicates in a range of informal and formal contexts by adopting a range of roles in group, classroom, school and community contexts</li> <li>› EN2-2A plans, composes and reviews a range of texts that are more demanding in terms of topic, audience and language</li> <li>› EN2-3A uses effective handwriting and publishes texts using digital technologies</li> <li>› EN2-4A uses an increasing range of skills, strategies and knowledge to fluently read, view and comprehend a range of texts on increasingly challenging topics in different media and technologies</li> <li>› EN2-5A uses a range of strategies, including knowledge of letter-sound correspondences and common letter patterns, to spell familiar and some unfamiliar words</li> <li>› EN2-7B identifies and uses language forms and features in their own writing appropriate to a range of purposes, audiences and contexts</li> </ul> <p>Mathematics K-10</p> <ul style="list-style-type: none"> <li>› MA2-7NA represents, models and compares commonly used fractions and decimals</li> <li>› MA2-10MG measures, records, compares and estimates areas using square centimetres and square metres</li> </ul> <p>Geography K-10</p> <ul style="list-style-type: none"> <li>› GE2-1 examines features and characteristics of places and environments</li> <li>› GE2-2 describes the ways people, places and environments interact</li> </ul> <p>History K-10</p> <ul style="list-style-type: none"> <li>› HT2-2 describes and explains how significant individuals, groups and events contributed to changes in the local community over time</li> </ul>	<p>A presentation in groups with the purpose of persuading the teachers to grant the group the permission to research certain animals and plants of choice. This diagnostic assessment indicates the students' understanding of the task as well as prior knowledge of the content around the project.</p> <p>Formative assessment will be embedded throughout the project and comprise teachers monitoring the students' research and design process to keep the project on track.</p> <p>Stakeholders (NPWS staff, community members, parents) will be invited into the classrooms for students to present their work in progress and ask questions for further work that they have planned.</p> <p>Summative assessment is by way of formally assessing the students' final signs against the criteria defined in the requirements.</p>

Content	Teaching, learning and assessment	Resources
<p>Stage 2 - Handwriting and using digital technologies</p> <p>Students:</p> <ul style="list-style-type: none"> <li>▪ <b>use a range of software including word processing programs to construct, edit and publish written text, and select, edit and place visual, print and audio elements (ACELY1685, ACELY1697)</b> </li> </ul> <p>Respond to and compose texts</p> <ul style="list-style-type: none"> <li>▪ <b>recognise that effective handwriting and presentation of work is required in order to communicate effectively for a range of audiences</b></li> </ul> <p>Develop and apply contextual knowledge</p> <p>Stage 2 - Writing and representing 1</p> <p>Students:</p> <p>Develop and apply contextual knowledge</p> <ul style="list-style-type: none"> <li>▪ <b>identify key elements of planning, composing, reviewing and publishing in order to meet the demands of composing texts on a particular topic for a range of purposes and audiences</b> ★</li> <li>▪ <b>experiment and share aspects of composing that enhance learning and enjoyment</b></li> <li>▪ <b>discuss issues related to the responsible use of digital communication</b>  </li> </ul> <p>Understand and apply knowledge of language forms and features</p> <ul style="list-style-type: none"> <li>▪ <b>plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features (ACELY1682, ACELY1694)</b>  ★</li> </ul> <p>Respond to and compose texts</p> <ul style="list-style-type: none"> <li>▪ <b>plan, compose and review imaginative and persuasive texts</b></li> <li>▪ <b>discuss aspects of planning prior to writing, eg knowledge of topic, specific vocabulary and language features</b></li> <li>▪ <b>plan and organise ideas using headings, graphic organisers, questions and mind maps</b></li> <li>▪ <b>experiment with visual, multimodal and digital processes to represent ideas encountered in texts</b> </li> <li>▪ <b>identify elements of their writing that need improvement and review using feedback from teacher and peers</b></li> <li>▪ <b>reread and edit texts for meaning, appropriate structure, grammatical choices and punctuation (ACELY1683)</b> </li> <li>▪ <b>reread and edit for meaning by adding, deleting or moving words or word groups to improve content and structure (ACELY1695)</b></li> </ul> <p>Stage 2 - Reading and viewing 1</p> <p>Students:</p> <p>Develop and apply contextual knowledge</p> <ul style="list-style-type: none"> <li>▪ <b>draw on experiences, knowledge of the topic or context to work out the meaning of unknown words</b></li> </ul> <p>Understand and apply knowledge of language forms and features</p> <ul style="list-style-type: none"> <li>▪ <b>use metalanguage to describe the effects of ideas, text structures and language features of literary texts (ACELT1604)</b> ★</li> </ul>	<p><b>1. Learning Quest: Student gain contextual understanding</b></p> <p>Provide an overview of the task to the class, including introducing some examples of local flora and fauna and examples of interpretive signs.</p> <p>Excursion to Taronga Zoo (or a local walking track with signage). Questioning students as to the purpose of the signs and the components of each sign. What are the features of the signs that make them most effective for the purpose? How would students improve the signs?</p> <p><i>Assessment: Verbal responses and insight provided by students to demonstrate their understanding of the features of the signs that make them suitable to convey the factual information.</i></p> <p><b>2. Learning Quest: Understand the task</b></p> <p>Bring in a community expert (e.g. National Parks and Wildlife Ranger) into the classroom to provide further background knowledge and requirements of the task. Students are encouraged to ask relevant questions relating to issues that they need to know in order to carry out the task. Students make informal "meeting notes" to document important information that our client tells us.</p> <p><i>Assessment: Accuracy and completeness of meeting notes taken by students.</i></p> <p><b>3. Learning Quest: Initial inquiry</b></p> <p>Students undertake individual research to identify 5 different animals or plants that can be found in the local area. This can include introduced species and pests. Students prepare a persuasive presentation to deliver to the class with the purpose of them being allocated particular animals or plants to study for their signs.</p> <p>Teacher allocates one animal or plant to each student, based on their preferences evidenced in their persuasive presentation.</p> <p><i>Assessment: Students' oral presentation to the teacher. Assess understanding of the purpose of the task, understanding of the content, use of persuasive language to convince the teacher/client of their capabilities to complete the task effectively.</i></p> <p><b>4. Learning Quest: Students to gain an understanding of the financial scale of the project, the need for funding and how to obtain the funding</b></p> <p>Model the purpose and features of a persuasive text.</p> <p>Students, individually, produce a persuasive letter to the current or target sponsors of the nature track requesting financial support, by way of donation, for the project.</p> <p><i>Assessment: Structure, language, spelling and punctuation, and how they orient, engage and persuade</i></p>	<p>0. Fairfax Walking Track.pptx</p> <p>Sketch a bird: <a href="https://www.youtube.com/watch?v=kS4Pqw11Ht4">https://www.youtube.com/watch?v=kS4Pqw11Ht4</a></p> <p>Sketch a lizard: <a href="https://www.youtube.com/watch?v=d7ihqQ7F_O4">https://www.youtube.com/watch?v=d7ihqQ7F_O4</a></p> <p>Sketch trees: <a href="https://www.youtube.com/watch?v=7XHuyuqSVahA">https://www.youtube.com/watch?v=7XHuyuqSVahA</a></p>



Content	Teaching, learning and assessment	Resources
<ul style="list-style-type: none"> <li>▪ understand how texts are made cohesive through the use of linking devices including pronoun reference and text connectives (ACELA1491)</li> <li>▪ know that word contractions are a feature of informal language and that apostrophes of contraction are used to signal missing letters (ACELA1480)</li> <li>▪ skim a text for overall message and scan for particular information, eg headings, key words</li> <li>▪ identify and explain language features of texts from earlier times and compare with the vocabulary, images, layout and content of contemporary texts (ACELY1686) ✨</li> </ul> <p>Develop and apply graphological, phonological, syntactic and semantic knowledge</p> <ul style="list-style-type: none"> <li>▪ use graphological, phonological, syntactic and semantic strategies to respond to texts, eg knowledge of homophones, contractions, syllables, word families and common prefixes</li> <li>▪ identify syllables in multisyllabic words in order to support decoding of longer words in context to make meaning</li> <li>▪ recognise high frequency sight words (ACELA1486)</li> </ul> <p>Respond to, read and view texts</p> <ul style="list-style-type: none"> <li>▪ read different types of texts by combining contextual, semantic, grammatical and phonic knowledge using text processing strategies for example monitoring meaning, cross checking and reviewing (ACELY1679, ACELY1691) ✨</li> <li>▪ use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts (ACELY1680, ACELY1692) ✨</li> <li>▪ use strategies to confirm predictions about author intent in imaginative, informative and persuasive texts</li> <li>▪ recognise how aspects of personal perspective influence responses to texts</li> <li>▪ recognise cohesive links in texts, eg pronouns that refer back to particular people or things, and understand how they contribute to meaning</li> <li>▪ connect information by observing text connectives</li> <li>▪ summarise a paragraph and indicate the main idea, key points or key arguments in imaginative, informative and persuasive texts</li> <li>▪ interpret text by discussing the differences between literal and inferred meanings</li> <li>▪ justify interpretations of a text, including responses to characters, information and ideas</li> </ul> <p>Stage 2 - Speaking and listening 1 Students:</p> <p>Understand and apply knowledge of language forms and features</p> <ul style="list-style-type: none"> <li>▪ understand that successful cooperation with others depends on shared use of social conventions, including turn-taking patterns, and forms of address that vary according to the degree of formality in social situations (ACELA1476) 🏢</li> <li>▪ understand and adopt the different roles in a debate, eg through</li> </ul>	<p><i>the reader.</i></p> <p><b>5. Learning Quest: Students apply area concepts to make the sign fit for the purpose</b></p> <p>Revise area of a rectangle, how to calculate the area and dividing a rectangle into smaller rectangles and calculating the area of each. Discuss potential sizing of the interpretive signs and propose that each interpretive sign will be the size of an A4 page and will be in landscape orientation. Students investigate dividing the page into different areas to convey all of the information effectively. Teacher uses this research to produce a standard template sign.</p> <p><i>Assessment: Application of area concepts to divide the sign into smaller, practical sections and demonstrate selection of areas that are reasonably applicable.</i></p> <p><b>6. Learning Quest: Formulating the plan</b></p> <p>Class discussion recapping the information contained in the interpretive signs at the zoo/local nature walk. Create a list of required information for an interpretive sign. How does the information differ for flora and fauna?</p> <p>Teacher creates 2 checklists of information required on their interpretive signs based on the discussion/brainstorming of content of the text of the interpretive signs - one for flora and one for fauna.</p> <p>Students provided with a checklist of information required on their interpretive signs.</p> <p><i>Assessment: Participation and quality of input in discussion.</i></p> <p><b>7. Learning Quest: Identify and explore the original languages spoken in the local area</b></p> <p>Discuss how languages have changed over time and why some might be preserved. Discuss how languages have changed in the local area, e.g. indigenous &gt; British &gt; Multilingual. Discussion of the latin name typically used in interpretive signs. Students research latin names and indigenous language names for their plant/animal. Students provided a template for the signs each and they now complete the title (name), latin name and indigenous name.</p> <p><i>Assessment: Completion of accurate indigenous name.</i></p> <p><b>8. Learning Quest: Understanding of the physical scale of the nature walk</b></p> <p>Maths - Length and Distance. In the classroom, students estimate the length of the walking track where the signs will be erected. Students estimate the height (and width if relevant) of their flora/fauna subject. In groups student measure the distance of the walking track with trundle wheels. Whilst walking the track, students keep an eye out for their flora/fauna subject</p>	

Content	Teaching, learning and assessment	Resources
<p><b>experience of formal debates and role-playing</b></p> <p>Respond to and compose texts</p> <ul style="list-style-type: none"> <li>▪ <b>interact effectively in groups or pairs, adopting a range of roles</b> </li> <li>▪ <b>use interaction skills, including active listening behaviours and communicate in a clear, coherent manner using a variety of everyday and learned vocabulary and appropriate tone, pace, pitch and volume</b> (ACELY1688, ACELY1792) </li> <li>▪ <b>adapt language to suit familiar situations, eg giving instructions to a younger child</b></li> </ul> <p>Stage 2 - Writing and representing 2</p> <p>Students:</p> <ul style="list-style-type: none"> <li>▪ <b>compare and review written and visual texts for different purposes and audiences</b></li> <li>▪ <b>make constructive statements that agree/disagree with an issue</b> </li> <li>▪ <b>express a point of view for a particular purpose in writing, with supporting arguments</b></li> <li>▪ <b>discuss how texts, including their own, are adjusted to appeal to different audiences, how texts develop the subject matter and how they serve a wide variety of purposes</b></li> </ul> <p>Respond to and compose texts</p> <ul style="list-style-type: none"> <li>▪ <b>understand how audience and purpose influence the choice of vocabulary</b></li> <li>▪ <b>use images in imaginative, informative and persuasive texts to enhance meaning</b></li> <li>▪ <b>examine how evaluative language can be varied to be more or less forceful</b> (ACELA1477) </li> <li>▪ <b>describe how audience and purpose impact on language forms and features in imaginative, informative and persuasive texts</b></li> <li>▪ <b>understand how a range of language features can shape readers' and viewers' understanding of subject matter</b></li> </ul> <p>Understand and apply knowledge of language forms and features</p> <ul style="list-style-type: none"> <li>▪ <b>identify and analyse the purpose and audience of imaginative, informative and persuasive texts</b></li> </ul> <p>Develop and apply contextual knowledge</p> <p>Stage 2 - The Earth's Environment</p> <p>Students explore the climate, natural vegetation and native animals of places in Australia and Asia. They examine the importance of natural vegetation and natural resources to the environment, animals and people and learn about the ways people value environments, including Aboriginal and Torres Strait Islander Peoples. Students identify sustainable practices and recognise that there are differing views on how sustainability can be achieved.</p> <p><b>Different environments</b></p> <p>Students:</p> <ul style="list-style-type: none"> <li>▪ investigate the natural characteristics of Australia and a country in Asia, for example: (ACHGK020) </li> <li>– comparison of climate, natural vegetation and native animals    </li> </ul>	<p>and measure if appropriate.</p> <p><i>Assessment: Accuracy of estimate and calculation of length.</i></p> <p><b>9. Learning Quest: Understanding of the purpose of the text on the signs and how the text features make it fit for the purpose</b></p> <p>Study of informative texts - purpose, language features, vocabulary featured in interpretive signs, audience for interpretive signs (adults and children) and how this affects language and vocabulary. Build a class word wall of specific words that would be common to interpretive signs.</p> <p>Students provided facts about an animal and they produce a short, well structured informative text based on the facts.</p> <p><i>Assessment: Applying knowledge of informative texts and given information to produce a well structured and accurate text,</i></p> <p><b>10. Learning Quest: Explore nature art and apply the techniques to their own flora/fauna object</b></p> <p>3 x art sessions. All students to learn to sketch a bird, a range of flora and a reptile. See links in the resources.</p> <p>Students sketch their flora/fauna object which will appear on their interpretive sign.</p> <p><i>Assessment: Formative assessment of recreated artworks and advise on techniques to improve. Final artwork of their flora/fauna object must be of a very high standard as they will appear on the signs.</i></p> <p><b>11. Learning Quest: Inquiry-based gathering of information</b></p> <p>Students research their flora/fauna object, ensuring they complete all fields on their checklist. Use of library and internet resources. Teacher circulates and guides research specific to the particular flora/fauna objects, e.g. life cycles, importance to the environment, etc.</p> <p>Explicit teaching of using research information and combining in a logical, flowing order that users of the factual information will find useful in the context of a nature trail.</p> <p><i>Assessment: Continuous formative assessment and advice.</i></p> <p><b>12. Learning Quest: Applying their research to produce an informative sign</b></p> <p>Students provided with 3 x 40 minute sessions to finalise research, produce their factual text for their interpretive sign, edit and finalise draft for showcasing. Peer review of finalised signs and final corrections made. Teacher reviews.</p> <p><b>13. Learning Quest: Communicating their findings</b></p>	

Content	Teaching, learning and assessment	Resources
<p><b>Significance of environments</b></p> <p>Students:</p> <ul style="list-style-type: none"> <li>investigate the importance of natural vegetation and natural resources to the environment, animals and people, for example: (ACHGK021, ACHGK022, ACHGK024) <ul style="list-style-type: none"> <li>identification of types of natural vegetation eg forests, grasslands, deserts VR</li> <li>explanation of the importance of natural vegetation to animals and the functioning of the environment eg provision of habitats, production of oxygen F 🌿 ⚙️</li> <li>discussion of the importance of natural vegetation and natural resources to people eg provision of food, medicine, fuel, timbers, fibres, metals F 🏠 ⭐</li> </ul> </li> </ul> <p>Students:</p> <ul style="list-style-type: none"> <li>discussion of ways waste can be managed sustainably VR 🌿 🇦🇺</li> </ul> <p>Stage 2 - Length 2</p> <p>Students:</p> <ul style="list-style-type: none"> <li>describe when a perimeter measurement might be used in everyday situations, eg determining the length of fencing required to enclose a playground (Communicating) 🏠 ⚙️</li> <li>estimate and measure the perimeters of two-dimensional shapes</li> <li>use the term 'perimeter' to describe the total distance around a two-dimensional shape 🏠</li> <li>recognise the features of a three-dimensional object associated with length that can be measured, eg length, height, width, perimeter 🏠</li> <li>select and use an appropriate unit to estimate, measure and compare lengths and distances <ul style="list-style-type: none"> <li>explain why two students may obtain different measures for the same length (Communicating, Reasoning) ⚙️</li> <li>select and use an appropriate device to measure lengths and distances (Problem Solving)</li> </ul> </li> <li>use a tape measure, ruler and trundle wheel to measure lengths and distances</li> </ul> <p>Use scaled instruments to measure and compare lengths (ACMMG084)</p> <p>Stage 2 - Fractions and Decimals 1</p> <p>Students:</p> <p>Model and represent unit fractions, including <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{3}</math> and <math>\frac{1}{5}</math> and their multiples, to a complete whole (ACMNA058)</p> <ul style="list-style-type: none"> <li>model fractions with denominators of 2, 3, 4, 5 and 8 of whole objects, shapes and collections using concrete materials and diagrams, eg</li> </ul> 	<p><b>and reflecting on the process</b></p> <p>Student discussion around the process of producing the signs. Revise the process that was undertaken, discuss what worked well, and what improvements could be made if we undertook a similar project again.</p> <p>Stakeholders meeting showcasing the signs and seeking feedback prior to finalisation. Selected students to present to the stakeholder's meeting. Students prepare a section of the presentaion each to communicate the objective of the project, the process of producing the signs and the final product.</p> <p>Students who attended the stakeholder's meeting report back to the class any feedback and changes required. Students make final adjustments to signs if required. Peer review of finalised signs. Teacher review.</p> <p><i>Assessment: Students' reflection of their learning and communication of this.</i></p>	



Content	Teaching, learning and assessment	Resources
<p>► recognise that as the number of parts that a whole is divided into becomes larger, the size of each part becomes smaller (Reasoning)</p> <p style="text-align: center;"><math>\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}</math></p> <ul style="list-style-type: none"> <li>▪ name fractions up to one whole, eg <math>\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}</math></li> <li>▪ interpret the denominator as the number of equal parts a whole has been divided into</li> </ul> <p>Stage 2 - Area 1</p> <p>Students:</p> <p>Recognise and use formal units to measure and estimate the areas of rectangles</p> <ul style="list-style-type: none"> <li>▪ recognise the need for the square centimetre as a formal unit to measure area</li> <li>▪ measure the areas of rectangles (including squares) in square centimetres</li> <li>▪ record area in square centimetres using words and the abbreviation for square centimetres (cm<sup>2</sup>), eg 55 square centimetres, 55 cm<sup>2</sup></li> <li>▪ estimate the areas of rectangles (including squares) in square centimetres <ul style="list-style-type: none"> <li>► discuss strategies used to estimate area in square centimetres, eg visualising repeated units (Communicating, Problem Solving)</li> </ul> </li> </ul> <p>Stage 2 - Living World</p> <p>Living things, including plants and animals, depend on each other and the environment to survive. (ACSSU073)</p> <p>Students:</p> <ul style="list-style-type: none"> <li>▪ identify some factors in the local environment that are needed by plants and animals for survival</li> <li>▪ outline the relationship between plants and animals, including that plants are able to use light to make food, while animals must eat plants or other animals to obtain food 🍌</li> <li>▪ investigate the role of living things in a habitat, eg plants as producers and microbes (micro-organisms) as decomposers 🦠</li> <li>▪ gather information about some relationships between living things, eg predator-prey, competitors and mutually beneficial relationships 🌿🐾</li> <li>▪ predict the effect of natural changes in the environment on some relationships between plants and animals, eg drought and fire</li> <li>▪ describe some examples of how science knowledge helps people to understand the effect of their actions on the environment and the survival of living things (ACSHE051, ACSHE062) 🧑🌿⚖️</li> </ul> <p>Stage 2 - Community and Remembrance</p> <p>The importance of Country and Place to Aboriginal and/or Torres Strait Islander peoples who belong to a local area. (This is intended to be a local area study with a focus on one Language group; however, if information or sources are not readily available, another representative area may be studied.) (ACHHK060)</p> <p>Students:</p> <ul style="list-style-type: none"> <li>▪ identify the original Aboriginal languages spoken in the local or regional area 🗣️</li> <li>▪ identify the special relationship that Aboriginal and/or Torres Strait Islander peoples have to Country and Place 🗣️🌿</li> <li>▪ respond to Aboriginal stories told about Country presented in texts or by a</li> </ul>		

Content	Teaching, learning and assessment	Resources
<p>guest speaker  </p> <p>ONE important example of change and ONE important example of continuity over time in the local community, region or state/territory (ACHHK061)</p>		

Enter your own title	Evaluation

## Syllabus images and equations

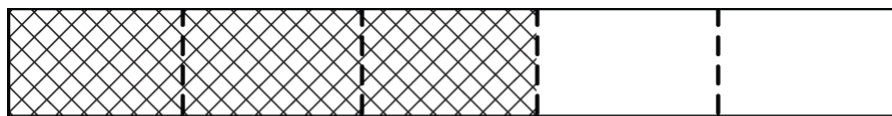
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$$\frac{1}{2}, \frac{1}{4}, \frac{1}{3}$$

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$$\frac{1}{5}$$

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$$\frac{3}{5}$$

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$$\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}, \frac{5}{5}$$

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