

# Connections to Country/Place

First Nations peoples have practiced sustainability and land management for thousands upon thousands of years. Their connection to Country/Place includes deep knowledge of the landscape and natural environment, waterways, navigation, direction and location.

There are traditional and historical methods of remembering pathways and travel routes using songlines. Listening to Country and observing the changing seasons would guide travel across lands and waters.

Indigenous Knowledges	Connecting Indigenous Knowledges and Mathematics	Connections to the Australian Curriculum
<p>Matt Burns (Quandamooka Traditional Custodian from North Stradbroke Island) shares his knowledge of seasonal and environmental indicators on Quandamooka Country.</p> <p>Migration of parrots and sea mullet indicates winter (cold weather) is coming. Sea eagles sing out twice a day to indicate that the tides are soon to change. Changes in the wattle tree flowers guide when and where to fish on the island.</p>	<p><b>Share Indigenous Knowledge about seasonal and environmental indicators</b></p> <p>Students build a body of knowledge of seasonal indicators in the local area as they:</p> <ul style="list-style-type: none"><li>draw their ideas of the seasonal and environmental indicators</li><li>explore seasonal indicators in the natural environment including changes to plant and animal behaviours</li><li>compare the duration of natural events such as flower blooms and animal behaviours such as bird nesting</li><li>create a timeline of a year divided into months and add images or photos of local environmental indicators</li><li>use the timeline to discuss event duration (how long they last) or time (when in the year they occur).</li></ul>	<p>In Year 1, students:</p> <ul style="list-style-type: none"><li>compare directly and indirectly</li><li>order events based on duration and explain their reasoning</li><li>investigate where First Nations peoples estimate, compare and communicate measurements, for example, the duration of seasons (AC9M1M01)</li><li>describe the duration and order of events using years, months, weeks, days and hours</li><li>investigate durations of time shown in First Nations seasonal calendars (AC9M1M03).</li></ul> <p>In Year 3, students do statistical investigations with guidance. They collect, represent and interpret data, showing differences in numbers and categories to respond to questions of interest. This could include investigating First Nations seasonal calendars where they collect data and:</p> <ul style="list-style-type: none"><li>make frequency tables and spreadsheets based on environmental indicators</li><li>create one-to-one data displays about frequency of environmental indicators for the current season (AC9M3ST03).</li></ul>
<p>Bart Pigram (Yawuru man from Broome) shares how he uses his knowledge of the Yawuru Country landscape to navigate on well-travelled cultural tracks.</p>	<p><b>Share Indigenous Knowledge about navigating through Country</b></p> <p>Students:</p> <ul style="list-style-type: none"><li>draw a map as if it were in the sand/soil</li><li>identify, find and map parts of Country</li><li>describe routes to and from landmarks</li><li>reflect on drawing a map and justify their use and positions of landmarks.</li></ul>	<p>In Year 3, students:</p> <ul style="list-style-type: none"><li>interpret and re-create – in 2 dimensions – familiar environments, showing landmarks and objects relative to each other</li><li>explore land maps or cultural maps First Nations people would use to identify and find important landmarks such as waterholes (AC9M3SP02).</li></ul> <p>In Year 4, students use grid references and directions to:</p> <ul style="list-style-type: none"><li>find and describe positions and pathways</li><li>make their own grid reference systems (AC9M4SP02).</li></ul>
<p>Bart Pigram (Yawuru man from Broome) shares how he uses his knowledge of the Yawuru Country landscape to navigate on well-travelled cultural tracks.</p>	<p><b>Share Indigenous Knowledge about distances to navigate through Country</b></p> <p>Students:</p> <ul style="list-style-type: none"><li>draw what they know about the ways First Nations people travelled through Country</li><li>estimate and calculate the distances travelled</li><li>discuss the use of scale to describe distances</li><li>reflect on distances calculated and justify their use of metric measurements.</li></ul>	<p>In Year 6, students:</p> <ul style="list-style-type: none"><li>convert between common metric units of length</li><li>choose and use decimal places in metric measurements relevant to a problem</li><li>explore distances travelled by First Nations people (AC9M6M01).</li></ul>
<p>Jason Smith (Palawa man from Lutruwita) shares his knowledge of the changes in the environment including land, sea and sky on Palawa Country.</p>	<p><b>Share Indigenous Knowledge about environmental indicators</b></p> <p>Students:</p> <ul style="list-style-type: none"><li>draw environmental indicators, such as winds, observed on Country</li><li>investigate local weather and wind patterns through estimating and measuring wind direction, speed and intensity and describing its effect on the environment</li><li>discuss the use of scale to describe wind intensity</li><li>reflect on the scale they used to describe wind intensity.</li></ul>	<p>In Year 8, students:</p> <ul style="list-style-type: none"><li>investigate ways to collect data, including experiment and observation</li><li>explain how to get data and implications with these techniques</li><li>use digital tools or experiment with ways to collect data to measure wind intensity using a relevant scale (AC9M8ST01).</li></ul>