

Gathering food resources

For millennia, First Nations people have used tools, weapons and equipment to gather food, including nuts and berries, meat and seafood. These practices span water and land resources.



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 bunya nuts as a food source. Bunya trees are ancient trees that have survived in Australia since the age of the dinosaurs. Bunya nuts are harvested each year between November and March with a larger crop every 3 years.</p>	<p>Share Indigenous Knowledge of bunya nuts Students:</p> <ul style="list-style-type: none"> use bunya nuts to count collections present bunya nuts in different patterns subitise or count collections communicate their ideas. <p>Students could mark the months when bunya nuts can be harvested.</p>	<p>In Foundation year, students partition and combine collections up to 10 using part-part-whole relationships and subitising to recognise and name the parts (AC9MFN04).</p> <p>In Year 1, students describe the duration and sequence of events using years, months, weeks, days and hours (AC9M1M03).</p>
<p>Matt Burns (Quandamooka Traditional Custodian from North Stradbroke Island) shares his knowledge of bunya nuts as a food source and for trade and barter.</p> <p>Jason Smith (Palawa man from Lutruwita) shares his knowledge of food such as mutton birds for trade and barter.</p>	<p>Share Indigenous Knowledge about resources used for trading purposes where they are plentiful on different parts of Country Students:</p> <ul style="list-style-type: none"> recognise trading of natural resources by First Nations people as a form of economy and an alternative to coins or money role play trading natural resources. 	<p>In Year 3, students recognise the relationships between dollars and cents and represent money values in different ways (AC9M3M06).</p>
<p>Matt Burns (Quandamooka Traditional Custodian from North Stradbroke Island) shares his knowledge of bunya nuts as a food source. He describes travel between the island and the mainland to collect the bunya nuts.</p>	<p>Share Indigenous Knowledge about bunya nuts and ways First Nation people travelled to source foods Students:</p> <ul style="list-style-type: none"> locate the Bunya Mountains and Stradbroke Island (which Matt discussed) on a map estimate and calculate the distance students would need to travel from school to the Bunya Mountains investigate local cultural maps or other maps to estimate distances travelled create a simple map using grid references or other ways to locate landmarks. 	<p>In Year 3, students:</p> <ul style="list-style-type: none"> interpret and re-create – in 2 dimensions – familiar environments, showing landmarks and objects relative to each other explore land maps or cultural maps First Nations people would use to identify and find important landmarks such as waterholes (AC9M3SP02). <p>In Year 4, students use grid references and directions to:</p> <ul style="list-style-type: none"> find and describe positions and pathways make their own grid reference systems (AC9M4SP02).
<p>Matt Burns (Quandamooka Traditional Custodian from North Stradbroke Island) shares his knowledge of boomerangs, including their design and use in hunting, fire making and weaponry. He shares measurements of duration of flight and distances when thrown.</p>	<p>Share Indigenous Knowledge about boomerang design Students:</p> <ul style="list-style-type: none"> draw different boomerangs showing the different angles, and estimate and compare to 90° measure angles of boomerangs using protractors, for example, to find possible angle measurements of the interior angles if the boomerangs were to form a triangle <p>Students can also:</p> <ul style="list-style-type: none"> conduct a fair test to throw balls of different types and compare distances thrown communicate their findings and compare to distances boomerangs have been thrown. 	<p>In Year 5, students:</p> <ul style="list-style-type: none"> estimate, construct and measure angles in degrees, using appropriate tools (including a protractor) and relate these measures to angle names (AC9M5M04) choose appropriate metric units when measuring the length, mass and capacity of objects and use smaller units or a combination of units to obtain a more accurate measure (AC9M5M01). <p>In Year 7, students demonstrate that the interior angle sum of a triangle in the plane is 180° and apply this to determine the interior angle sum of other shapes and the size of unknown angles (AC9M7M05).</p>
<p>Matt Burns (Quandamooka Traditional Custodian from North Stradbroke Island) shares his knowledge of spears. He explains how a woomera, an extension of the arm, is used to deliver more power.</p>	<p>Share Indigenous Knowledge about spear technology Students:</p> <ul style="list-style-type: none"> draw their interpretation of angle of release and trajectory (pathway in flight) use mathematical modelling to investigate the paths of projectiles. <p>Students could also:</p> <ul style="list-style-type: none"> conduct a (safe) fair test using a broom stick collect and interpret data and communicate their ideas reflect on the process they used to investigate and report on the trajectory. 	<p>In Year 9, students use mathematical modelling to:</p> <ul style="list-style-type: none"> solve applied problems (including financial) involving change formulate problems, choosing to use either linear or quadratic functions interpret solutions in terms of the situation evaluate the model and report methods and findings. <p>This can include modelling practical concepts using simple quadratic functions, tables and graphs (hand drawn or using digital tools) and algebraically interpreting features of the graphs such as the turning point and intercepts, for example, paths of projectiles (AC9M9A05).</p>