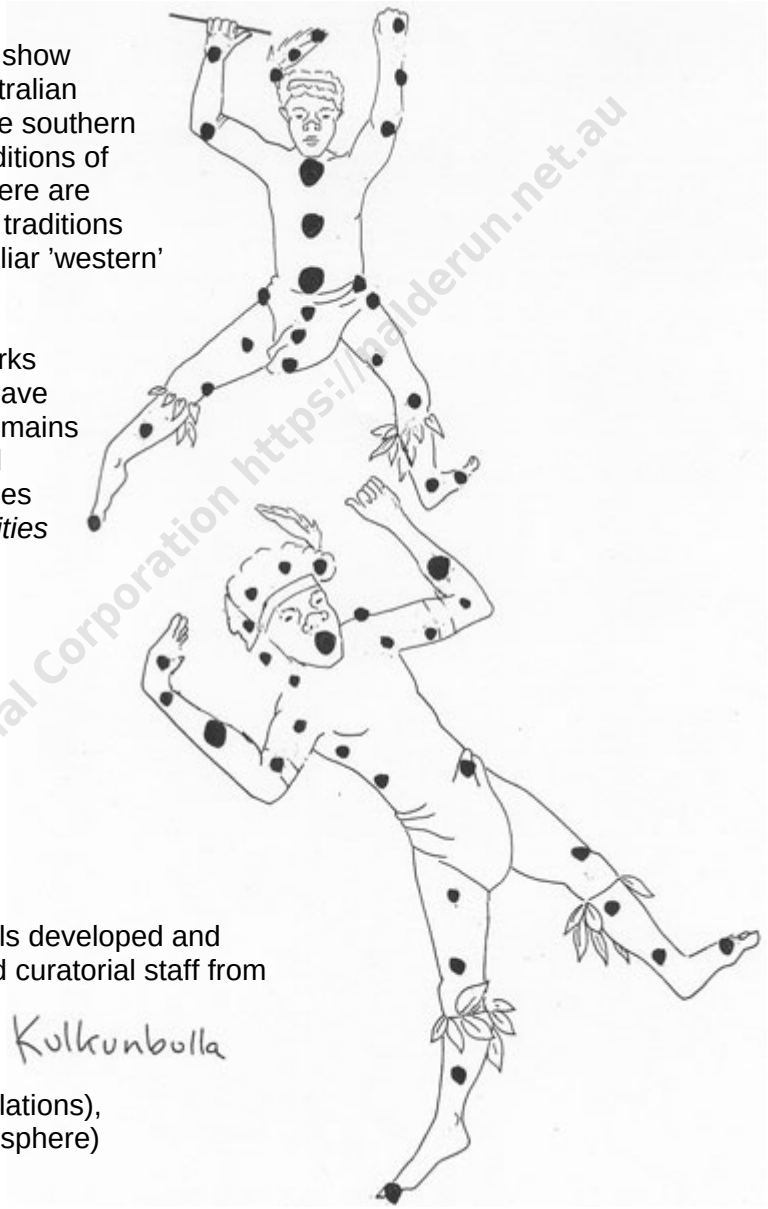
Nalderun Education Aboriginal Corporation
Curriculum Resource

Resource Title	Stories in the Stars – the Night Sky of the Boorong People
Aboriginal Protocols	
Person	Patricia Charles and Martin Bush (Non-Indeigenous)
Mob Group/Country	This content was created based on Boorong clan, Wergaia speaking people of the Kulin nations.
Content Country	This resource is written based on traditions from the Boorong clan, Wergaia speaking people of the Kulin nations.
Curriculum Area	• History VC2HH8K06
Year Levels	• 7 - 8, Secondary
Pedagogies	• The 8 Ways, Story Sharing
Ways of Assessing	
First Nations Education Academics that back your reasons	
Any other info / comments	

Stories in the Stars – the night sky of the Boorong people

The *Stories in the Stars* planetarium show explores the way an Indigenous Australian culture describes constellations in the southern skies. Although the astronomical traditions of Australian Aboriginal groups vary, there are broad similarities. These Indigenous traditions are very different from the more familiar 'western' European traditions.

The planetarium show at Scienceworks and related school-based activities have Victorian curriculum links with the domains of *Science, Humanities (History)* and *Civics and Citizenship*. These activities also link with the domains of *Humanities (Geography), Communication* and *Thinking Processes.*



Naldera Run Education Aboriginal Corporation https://halderun.net.au

Acknowledgements

This information is based on materials developed and researched by education officers and curatorial staff from Scienceworks, Museum Victoria.

Text: Patricia Christies, Martin Bush
Illustrations: Janet Mathews (constellations),
Lenna Angelovska (planisphere)

The support of the North-West Nations, the Victorian Department of Education and Early Childhood Development and the Catholic Education Office is gratefully acknowledged.

© Museum Victoria 2005, published online 2008

Teachers may copy material in this kit for classroom use.

SCIENCEWORKS

Synopsis of the show –
Stories in the Stars: the night sky of the Boorong people

How the southern night sky is seen by the Boorong clan from north-west Victoria.

Erica and Daniel are two Indigenous Australian teenagers from the city. This weekend, instead of going to a party, they are at Lake Tyrrell in north-west Victoria, which is their family's country. They spend the weekend walking around the lake with Grandma and Grandpa, hearing stories about the constellations in the night sky and learning about how this relates to their culture. By the end of the weekend they have forgotten about their party and want to come back to the lake and find out more.

European night sky stories are familiar to many people. However the stories indigenous to the southern skies are less well known. Although different Australian Aboriginal groups have different astronomical traditions, there are some broad similarities between many traditions. These are often very different from the astronomy that is familiar to Europeans. Indigenous Australian astronomy describes many constellations that cannot be seen from northern latitudes. Even constellations that can be seen from Europe appear in a different way in the sky in the southern hemisphere.

Like other cultural traditions, astronomy is important not just for its own sake, but is integrated with other forms of knowledge. The changing night skies mirror seasonal patterns in the activities of animals and plants. Astronomical events could be messages about events on the ground. In many cases the landscape itself is seen as a reflection of the patterns in the night sky.

Background information

Stories in the Stars describes astronomical traditions from the Boorong clan. This clan was a member of the Wergaia speaking peoples in northwest Victoria. This region is still home to other Wergaia speaking people of the Kulin nations - Wergaia, Wotjobaluk, Dja Dja Wrung. The Boorong clan no longer exists as a separate entity, but their descendants live in north-west Victoria and throughout Victoria. Our knowledge of the Boorong astronomical traditions comes largely through the writing of William Stanbridge. Stanbridge was a pastoralist who came to Victoria from England in 1841 and took up sheep farming. He moved into the north-west districts in the late 1840s where he became friends with an Assistant Protector of Aborigines, and became interested in aboriginal culture.

Over the last decade Stanbridge's writings have been researched by historian John Morieson. *Stories in the Stars* is based on this work and in particular the booklet ‘Stars over Tyrell: The Night Sky Legacy of the Boorong’.

Stories in the Stars was produced by the Melbourne Planetarium in conjunction with the North-West Nations Aboriginal Corporation. The cultural rights to the traditions described in the show are held by the North-West Nations.

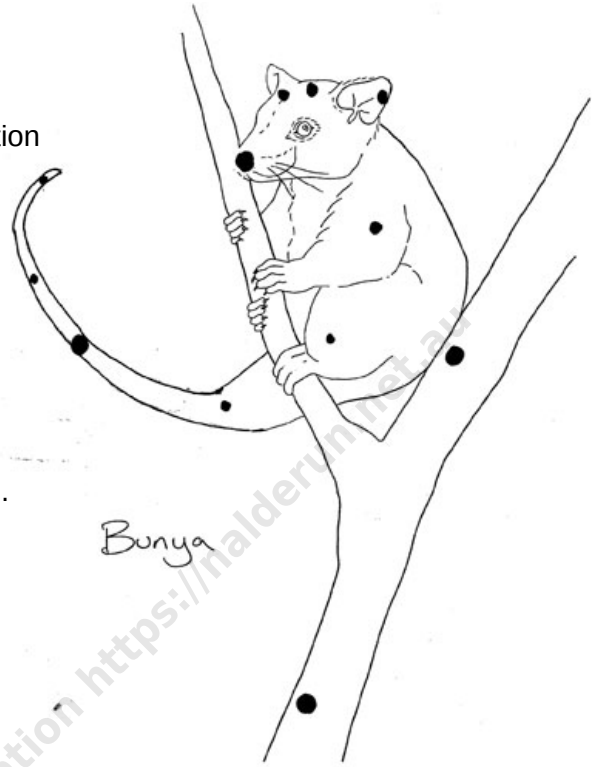
Melbourne Planetarium Aboriginal Corporation https://mpac.vic.net.au

Constellations of the Boorung people

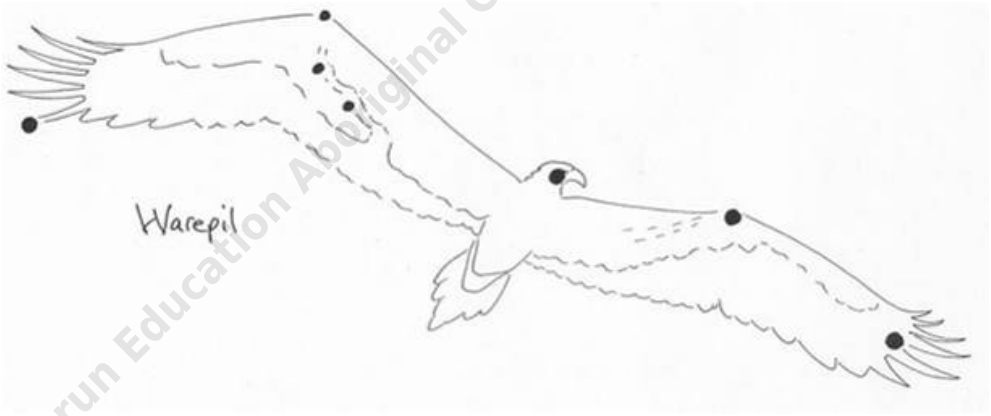
Bunya (Boon-ya 'oo' as in book)

Bunya, the possum can be seen in the constellation known to us as the Southern Cross. This can always be seen at night in Melbourne.

The tip of the Southern Cross is the nose of the possum and his tail hangs down to the left.
Bunya ran away from Tchingal, the Emu and hid in a tree for so long that he turned into a possum.



Warepil (Wah-re-pil)



Nulderun Education Aboriginal Corporation https://nalderun.net.au

The brightest star in the night sky is the centre of one of the most important Boorong constellations. That is Warepil, the male wedge-tailed eagle, chief of the Nuh-rum-bung-goo-tyas ('oo' as in book), the elders who created the land.

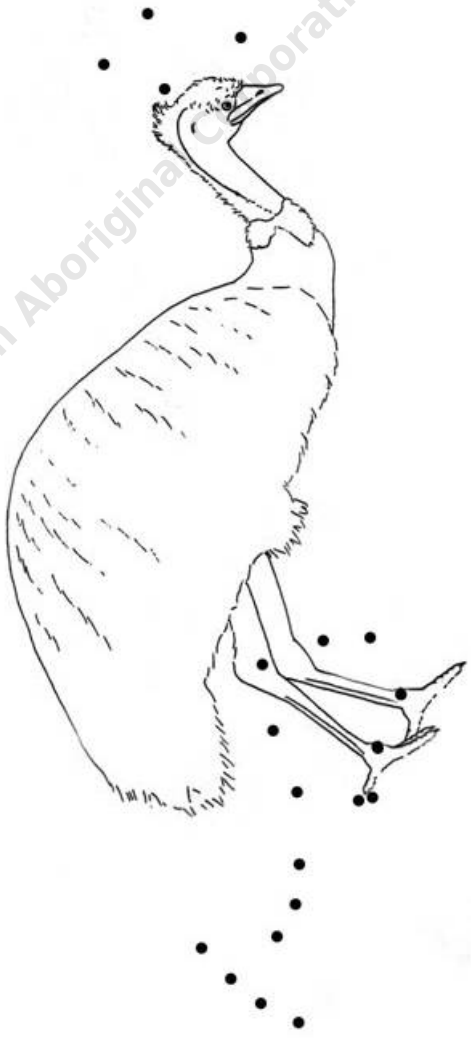
The wings of Warepil spread to either side of Sirius across less bright stars. The wedge-tailed eagle is an important figure right across Victoria. In Melbourne he was called Bunjil.

Tchingal (Chin-gel)

Tchingal is the evil emu that terrorised people. It was hunted by the brothers Bram, and eventually was killed by Weetkurrk. The battle between these helped to create the landscape of western Victoria.

Tchingal is seen in the sky as a series of dark nebulae, dark patches in the sky that are now known to be distant patches of gas and dust that obscure the light behind. Dark nebulae are not very prominent in European stories, but are more common in Aboriginal astronomies.

Tchingal starts at the Coalsack, the dark nebula next to the Southern Cross. This is Tchingal's head. The neck of Tchingal goes through the two Pointer stars and the body extends to the large dark nebula near Scorpius. Unfortunately, light pollution means that the Milky Way cannot be seen from the city, so you need to go to the dark skies of the country to see Tchingal.



Nalderun Education Aboriginal Corporation https://nalderun.net.au

Kulkunbulla

(Kool-koon-boo-la "oo" as in book)

Kulkunbulla, the two young dancing men, is found in one of the most recognisable constellations, known to Europeans as Orion.

Kulkunbulla is the belt and the sword of Orion.

Song and dance were very important to Indigenous Australian cultures, as they were one of the main ways that stories and information were remembered and passed on.



Nalderun Education Aboriginal Corporation https://nalderun.net.au

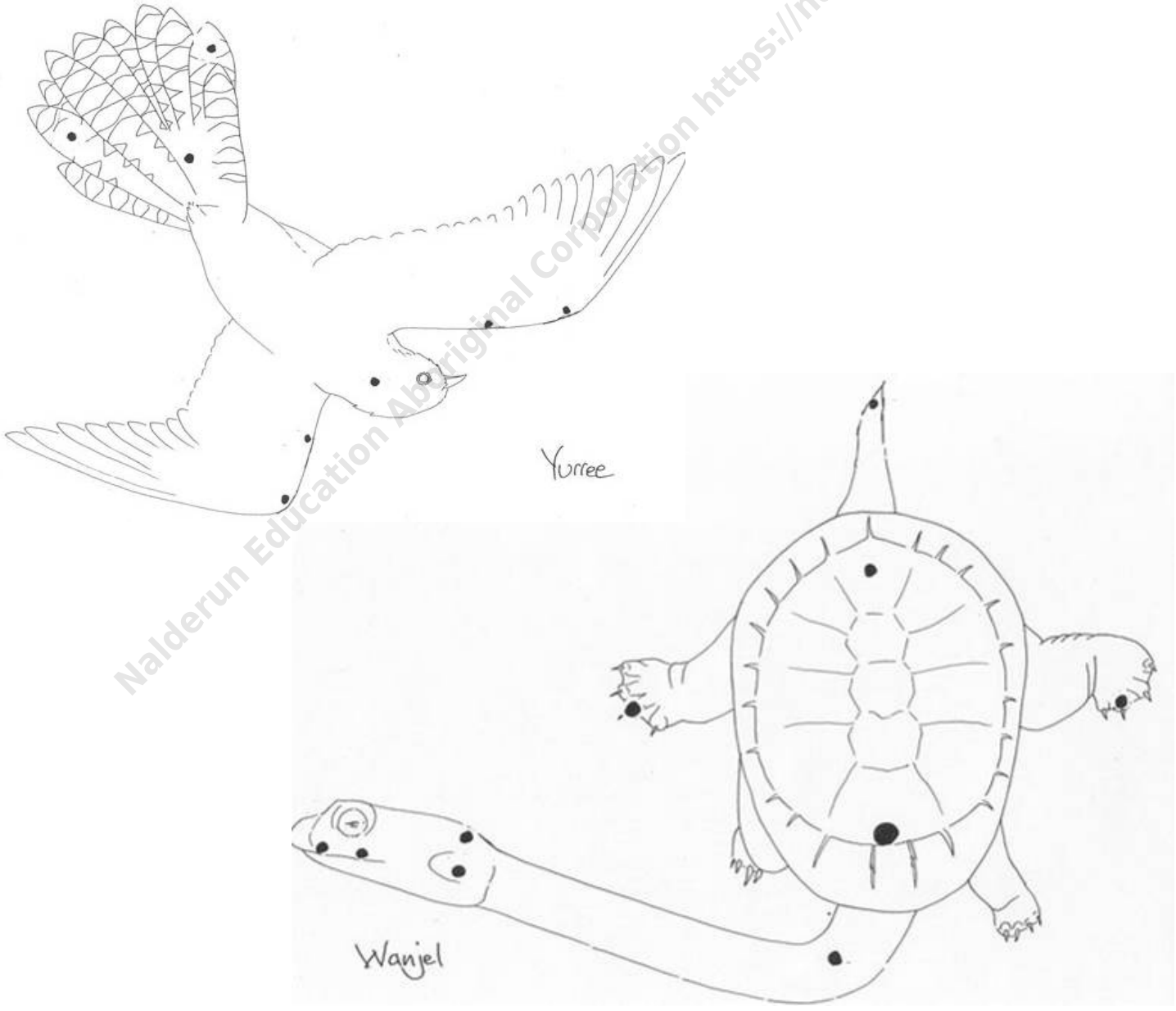
Yurree & Wanjel

(Yoo-ree "oo" as in book & Wan-jel)

Yurree and Wanjel are the two hunters who pursue Purra the kangaroo. Yurree is the fan-tailed cuckoo and Wanjel is the long-necked tortoise. They are a bright pair of stars in the sky known to Europeans as Castor and Pollux, the two twins of Gemini.

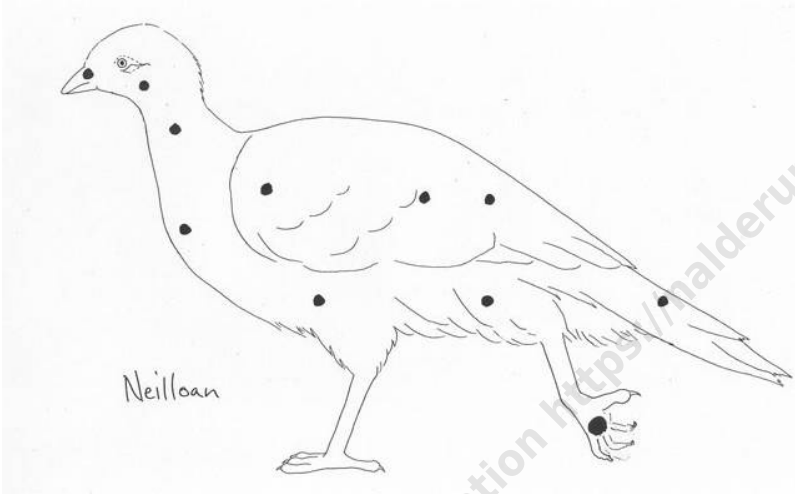
The appearance of these stars in the night sky indicates seasonal patterns for both of these animals. Yurree & Wanjel reappear in the sky in late spring, when the fan-tailed cuckoo becomes active again. The stars are most prominent in the sky in late summer, when the long-necked tortoise lays its eggs.

Nalderun Education Aboriginal Corporation https://nalderun.net.au



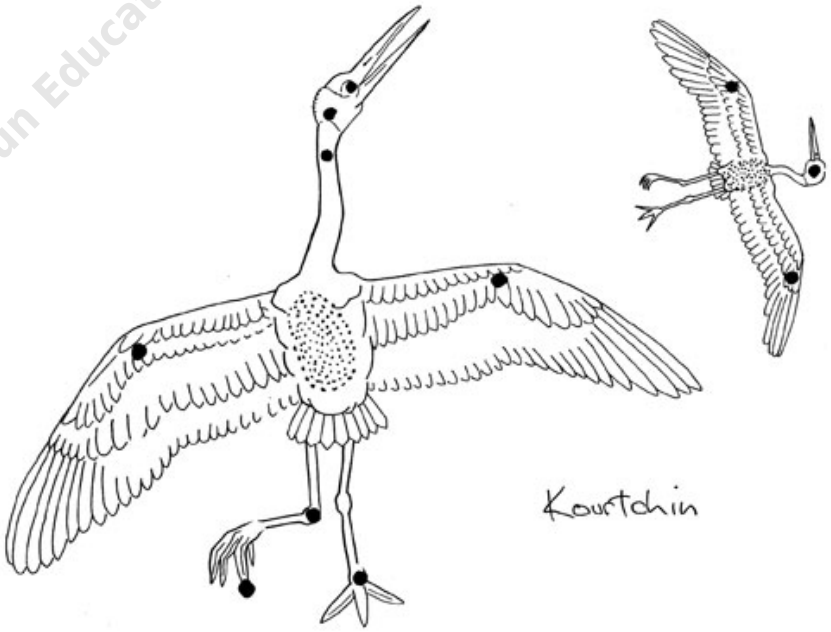
Neilloan (Nay-e-lo-en)

Neilloan is the Mallee fowl and is based around Vega, the fifth brightest star in the night sky. Neilloan is far to the north. It appears in the morning sky in autumn, when the mallee fowls start to construct their nests. It disappears from the evening sky in spring, when egg laying season begins. In late April, Neilloan is the source of the Lyrid meteor shower.



Brolgas (Kourtchin)

Another Boorong constellation that you need to go to the country to see is Kourtchin, the pair of dancing brolgas. A male brolga can be seen trumpeting, while a female is displaying nearby. The brolgas' bodies are the galaxies that we call the Large and the Small Magellanic Clouds, while surrounding stars make up the rest of the birds. This constellation is clearly visible from dark skies in Victoria all year round.



Nalderun Education Aboriginal Corporation https://nalderun.net.au

Make your own planispheres

Background information

With the naked eye, we are able to see about 3000 stars on a clear night (with minimum light pollution). Through a small telescope we are able to see up to about 6000 stars.

A planisphere is a flat map of the stars that can be used as a guide to help identify constellations and individual stars in the night sky. Planispheres can be used for any time of day throughout the year, but are designed to be used in one location only (e.g. Victoria). Two maps are provided here; one shows both Boorong and 'Western' constellations names.

The dotted line on the planisphere denotes the ecliptic. The constellations that run through this line are called the zodiac constellations (in western cultures). At different times, the planets are also visible as bright star-like objects close to the ecliptic. After having some practice using your planisphere, you may want to try and locate these planets. Their location is given in the Melbourne Planetarium's monthly online newsletter, *Skynotes*: http://museumvictoria.com.au/planetarium/

What you need

- A4 cardboard X 4
- Glue
- Photocopied sheets
- Scissors
- Split pin
- Sticky tape

What to do

Making the planisphere

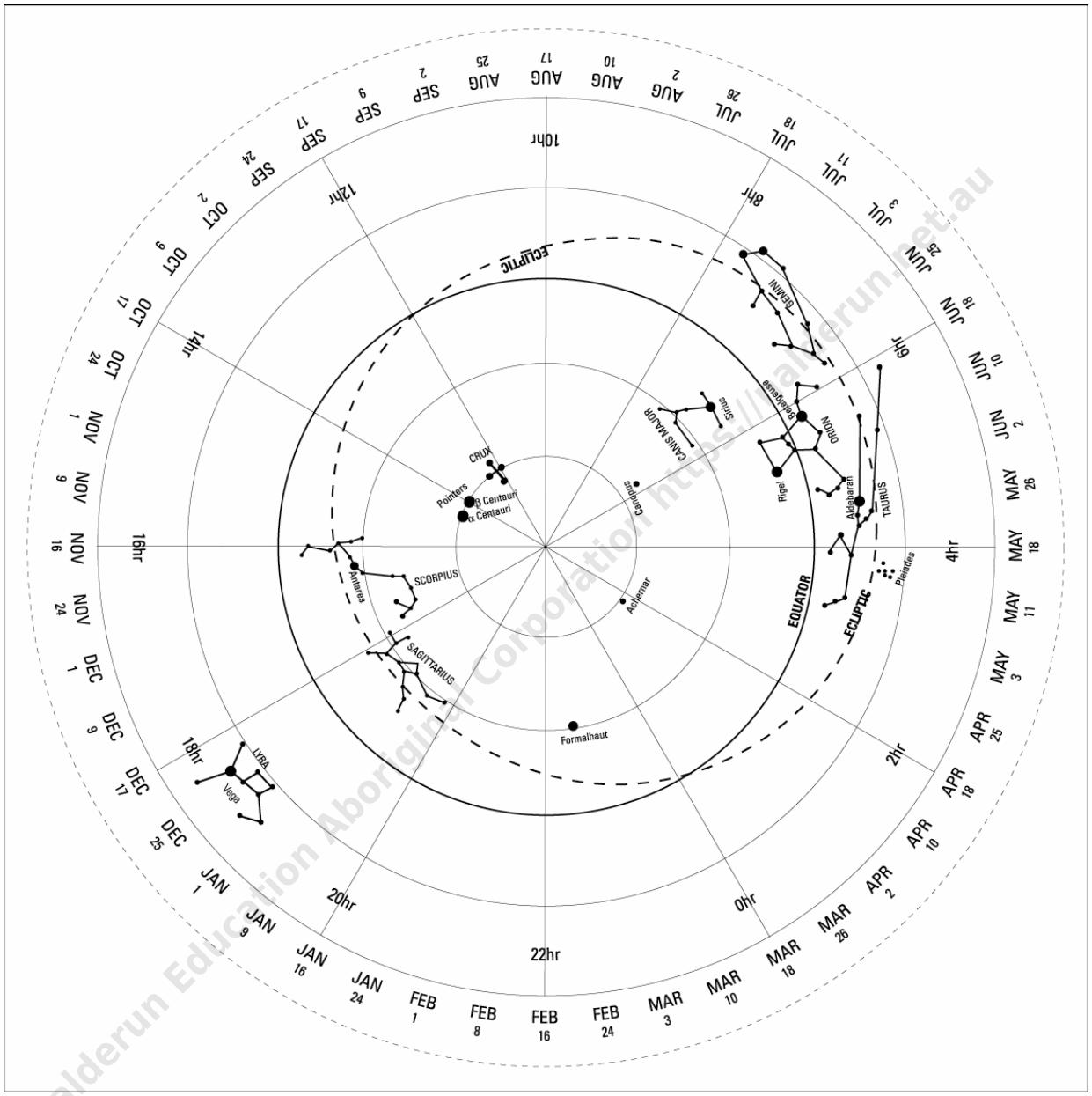
1. Take a copy of the planisphere cover and the two dials.
2. Glue them onto cardboard.
3. Carefully cut around the dashed lines on the circular dials and the square cover.
4. To make a back cover for your planisphere, trace around the square cover on a piece of cardboard and then cut it out.
5. Fasten one of the dials, the cover and back cover together by threading a split pin through the centre.
6. Use the sticky-tape to seal the planisphere so that only the dial is free to move.

Using the planisphere to find the constellations

7. On a clear night, choose a location away from bright lights.
8. Find and face south.
9. Hold up the planisphere so that the southern horizon is at the bottom.
10. Rotate the dial until you reach the correct time and date.
11. Find the Southern Cross/Bunya on the planisphere and then in the real night sky.
12. Use the Southern Cross/Bunya to help you find other constellations in the sky.

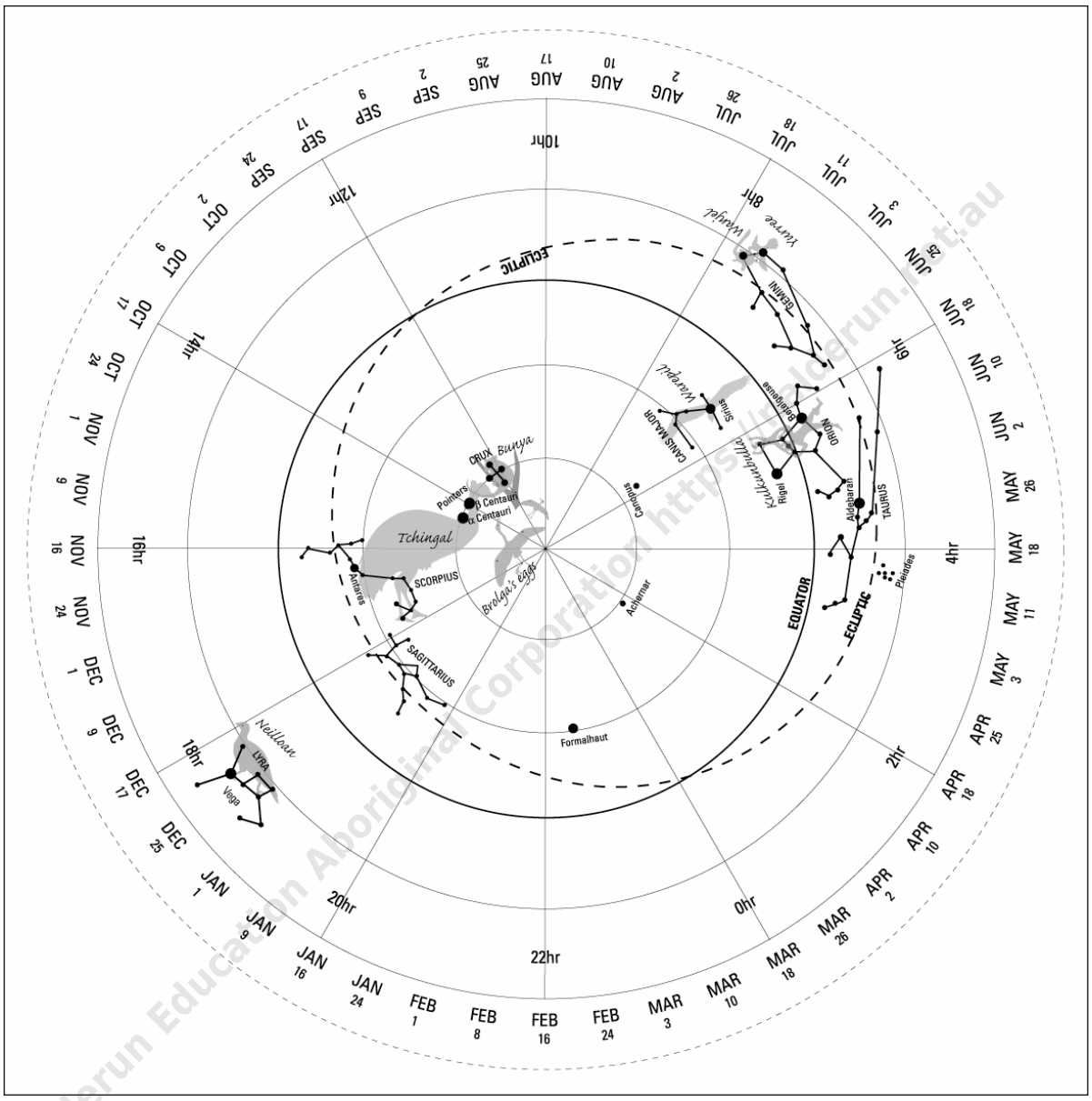
Nalderun Education Aboriginal Corporation http://nalderun.net.au

Western constellations dial



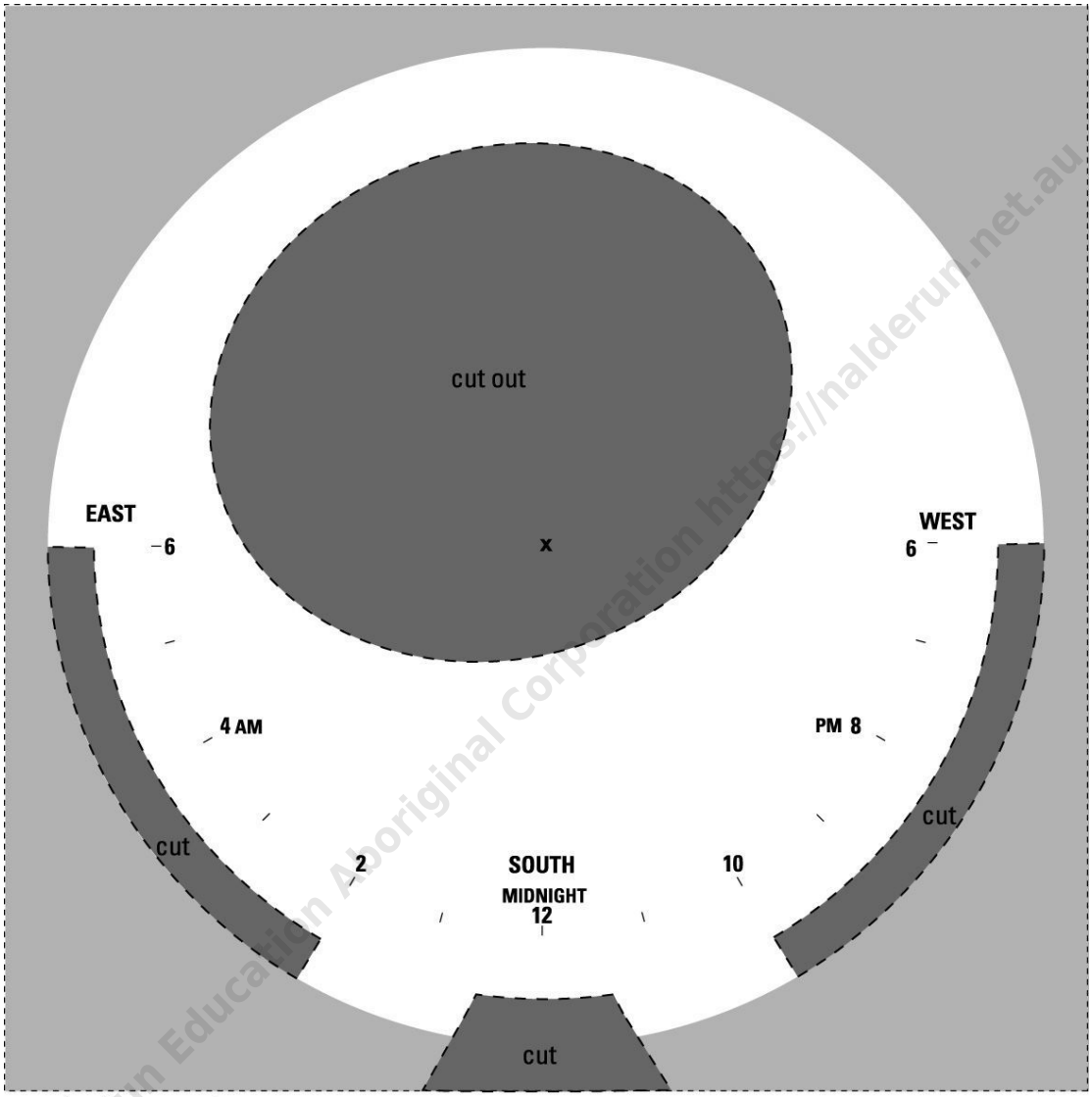
Nalderun Education Aboriginal Corporation http://nalderun.net.au

Boorong and Western constellations dial



Nalderun Education Aboriginal Corporation https://nalderun.net.au

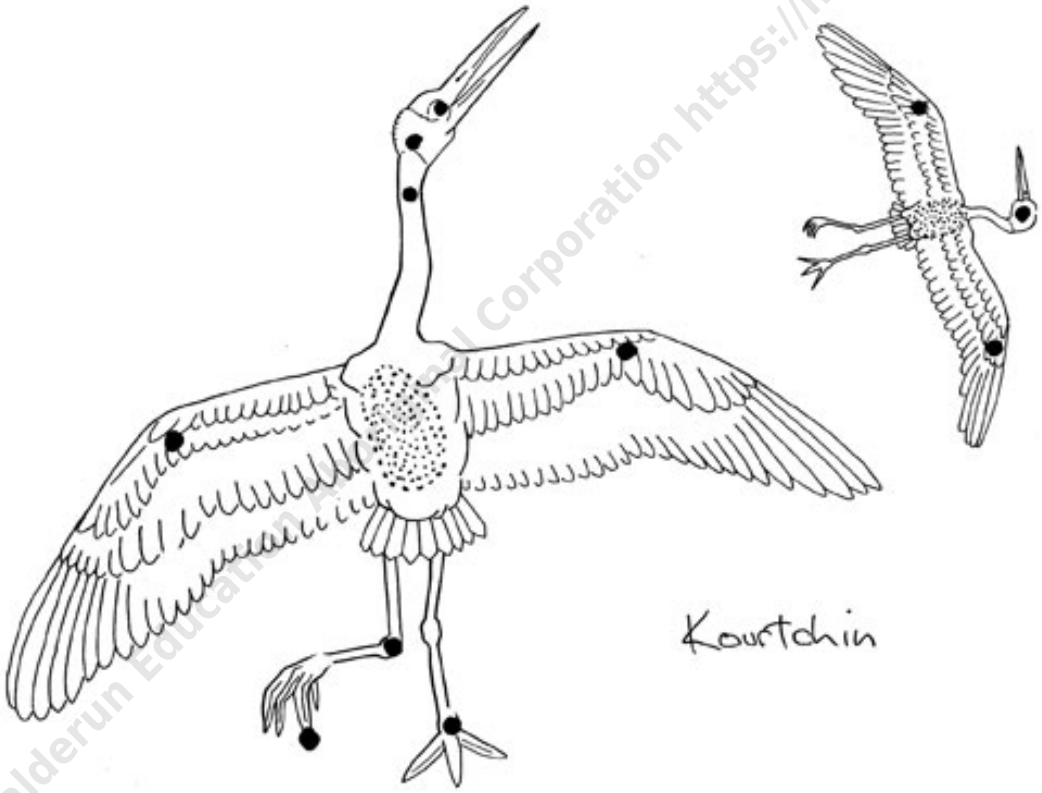
Planisphere cover



Nalderun Education Aboriginal Corporation https://nalderun.net.au

Star stories activities

- Play a memory game by matching the name of the Boorong constellation and the illustration.
- Play a memory game by matching the Boorong constellation to the corresponding European constellation.
- Create your own stories for the Booring constellations.
- Choose one Boorong constellation and illustrate its story.



Nalderun Educational Aboriginal Corporation https://nalderun.net.au