

# Astronomy of Australia's First Nations People



# About this video



## INDIGENOUS ASTRONOMY

### Astronomy of Australia's First Nations People

Tens of thousands of years ago, First Nations Australians looked up at pristine dark skies and formed a complex understanding of what the stars could tell humans about the land. This video explores the astronomical traditions of Aboriginal and Torres Strait Islander peoples, whose observations may be the first forms of astronomy conducted worldwide.

### Essential question:

What understandings do First Nations Australians have of astronomy?

### Key vocabulary:

First Nations

astronomy

artificial light pollution

skyglow

Dreaming

empirical

Milky Way

meteorite

timescale

### Learning intention:

Learn about First Nations' understandings of the night sky and draw comparisons between Dreaming stories and other civilisations.

# Before watching

## Activating prior knowledge: Think, Pair, Share

Have students use the Think, Pair, Share strategy to think about and discuss their knowledge of Earth's movements and astronomy, including star constellations, celestial objects, and planets.

Have pairs share with the rest of the class, and incorporate Dreaming stories. Do students know of any that are linked to astronomy or other Earth phenomena?

## Literacy connection

Incorporate literacy with the video by introducing the following vocabulary. Students should self-assess themselves on their prior knowledge of each word, and provide a predicted meaning as well.

Word	Self-Assessment Score	Predicted Meaning
First Nations	1   2   3   4	
astronomy	1   2   3   4	
artificial light pollution	1   2   3   4	
skyglow	1   2   3   4	
Dreaming	1   2   3   4	
empirical	1   2   3   4	
Milky Way	1   2   3   4	
<b><u>Self-Assessment Score Scale</u></b> 1: I have never seen this word before 2: I have heard of this word, but I don't know what it means 3: I know what this word means 4: I know what the word means, and could give an example		



# Whilst watching

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## Watching as a class



Watch the interactive video as a class and ask students to respond to the prompts throughout the interactive.



## Watching individually



Have students watch the interactive created for immediate feedback and solo viewing.

# After watching

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Below are two activities to extend students' learning and check for understanding.

## Activity 1: Constellation research

Students are to conduct research into the variety of star constellations or sky phenomena observed by a variety of First Nations groups in the night sky. Some examples may include:

- Emu in the Sky (multiple First Nations groups)
- Maliyan the wedge-tailed eagle (Wiradjuri)
- Baiame the creation ancestor (Wiradjuri)
- Scorpius

Students can complete this activity independently or in small groups. They will select one of the constellations and conduct a research project on the following:

- Name of constellation
- The First Nations group who observe it (name and location)
- What the constellation looks like and photographs if available
- The understanding or Dreaming story behind the constellation
- Any parallels between other cultures (e.g. Greek mythology)

Students prepare a presentation about their constellation and present it to the class.

After students have presented their findings, have different students/groups compare their findings and speak to the similarities and differences between their constellations.

### Support:

Provide students with a list of constellations to choose from and a template to guide their research.



### Extension:

What Dreaming stories exist across various First Nations groups that communicate understandings of the night sky? What do these Dreaming stories tell us, and what is their message?



## Activity 2: What does the sky tell us?

Students are to research how various First Nations groups used the night sky to tell them about time-related events. They can choose from:

- Native animal and/or plant cycles
- Food sources
- Weather forecast
- Seasonal variation
- Navigating across Country
- Calendar for special events (e.g. key ceremonial events)
- Other

Split students into small groups to conduct their research. They may decide to base their research on the local group of your area or choose another group in Australia. Ensure each group addresses a different topic from the list and there are no duplicates.

Have each group gather their research and contribute to a collaborative product (e.g. star map, book, short documentary, etc.)



### Support:

Provide a topic and a list of research websites for students to begin with. You could also provide a template to guide their research and to fill in.



### Extension:

Students can explore the relationship between First Nations art and the night sky to analyse rock art, paintings, and other traditional artworks to understand how the celestial bodies are represented and their significance in Indigenous astronomy and cosmology.

## Conclusion

Ask students to respond to the essential question posed at the beginning of the lesson.

Ask if they still have any questions about the content presented in the video. Discuss and answer these questions as a class.