

YEAR 1 EPISODE 1: TWO TRUTHS

Synopsis: Little J is torn between his teacher's and Nanna's knowledge.



This episode is about Tnorala (Gosse Bluff) which is a sacred site for Western Arrernte people. Scientists believe that a very long time ago a meteor from space crashed to earth, making an impact crater. Western Arrernte people have their own understanding of the creation of the crater, and Nanna shares their story. This episode

has a focus on the Western Arrernte story of how Thorala was created and the Scientists' story of how 'Gosse Bluff' was made, and how these are different but the same.

There are opportunities to use this episode and activities in the Key Learning Areas of English, Mathematics, Science, Health & Physical Education, and History & Social Sciences in order to meet the Cross Curriculum Priorities of Aboriginal and Torres Strait Islander Histories and Cultures (Version 8.4).

In this Teacher Pack, there is an overview of how this episode can be utilised for each of the above KLAs, including *prompting questions*, with an outline of some activities that build towards outcomes from the Australian Curriculum. There are also printable worksheets to be used in class, or to be adjusted to meet your specific teaching context.

Along with best practice pedagogical approaches, and AITSL Standards relating to Indigenous content, we encourage all teachers to find ways to link the content of each episode to the local community in which they teach. Some KLAs will have activities that you can alter, adjust or build upon in order to *connect to the local context*.

*If you're planning on utilising additional resources (such as videos, websites, books etc) touching on themes that are covered in this episode, we recommend you use the 'AIATSIS Guide to selecting and evaluating educational resources' to ensure you're representing Indigenous perspectives accurately.

Links to the Australian Curriculum (Version 9)

English	Mathematics	Science	Health & Physical Education	History & Social Sciences	The Arts
AC9E1LA07 AC9E1LA09 AC9E1LE01 AC9E1LE02 AC9E1LE03	AC9M1A02 AC9M1M01 AC9M1M02 AC9M1SP01	AC9S1U03 AC9S1I01 AC9S1I02	AC9HP2P01 AC9HP2P02 AC9HP2P03	AC9HS1K01 AC9HS1K03 AC9HS1K04 AC9HS2K01 AC9HS2K03 AC9HS2K04	AC9AMA2E02 AC9AVA2E01 AC9AVA2E02

English

This episode features opportunities to teach students about words that represent people, places and things (nouns) and details such as when, where and how (adverbs). It also has language specific to the learning area of *Science*. This episode can be utilised to build students' subject specific vocabularies, as well as understand how language is used differently depending on context, culture, people and perspective.

Arrernte words:

Tnorala - pronounced *no-rroll-a* (The crater's name from the beginning)

Tarne - pronounced *tar-na* (The wooden baby-carrier). This is what crashed to earth and made the crater. *English words:*

Gosse Bluff - (Ernest Giles originally named it Gosse Range in 1872 after Henry Gosse who was the brother of a colonial explorer William Gosse)

Impact crater - a crater on a planet or satellite caused by the impact of a meteorite or other object. **Meteorite** - this is what Scientists say made the crater.

You may choose to guide group discussions with your class asking **prompting questions** about the use of different words for places.

- "Why do you think Nanna uses the name Tnorala and Ms Chen (their teacher) says Gosse Bluff?"
 - (Answer: Nanna uses Tnorala because it is the original name for the crater, and Ms Chen uses the name Gosse Bluff because she is non-Indigenous so she uses the same name as Scientists. Sometimes people use both names, and some people only use the name from the language that they know or the culture they belong to)
- "There are a lot of places and things in Australia that have more than one name. Why do you think this might be?"
 - (Answer: Everything, including plants, animals, people, and places in Australia were named by First Nations people when time began. Then, when Europeans came from overseas, they decided to give everything other names too)
- "Do any of you know of a place that has two names?"
 - (Examples of places: Sydney/Warrane, Melbourne/Narrm, Brisbane/Meeanjin,
 Perth/Boorloo, Adelaide/Tarntanya, Broome/Rubibi, Cairns/Gimuuy, Canberra/Ngambri,
 and Hobart/nipaluna (the n is lowercase).



English

Connect to the local context:

This is an opportunity to find out about local places of cultural significance to First Nations peoples. Find out their original names, and the colonial names, and teach your students about the history of both.

There is a worksheet provided with images of native animals. Utilise community consultation or your pre-existing knowledge to help students learn two (or more) names for the animals. English, and the local language(s). This is also an opportunity to highlight which animals on the worksheet exist on the Country you're teaching on. For example - wombats only live in particular climates with certain kinds of ecosystems, with earth they can burrow in. Similarly, you may be teaching in an urban area where the environment has been so altered that many native animals no longer have access to their original homes. These are important conversations which also link to other subjects (such as *History, Geography*, and *Science*). Be sure to consult with the local community to ensure accuracy and gain approval before sharing cultural knowledge!

Code	Students learn to:
AC9E1LA07	understand that words can represent people, places and things (nouns, including pronouns), happenings and states (verbs), qualities (adjectives) and details such as when, where and how (adverbs)
AC9E1LA09	recognise the vocabulary of learning area topics
AC9E1LE01	discuss how language and images are used to create characters, settings and events in literature by First Nations Australian, and wide-ranging Australian and world authors and illustrators
AC9E1LE02	discuss literary texts and share responses by making connections with students' own experiences
AC9E1LE03	discuss plot, character and setting, which are features of stories





ENGLISH WORKSHEET

Image	English Name	Local Original Name
	Echidna	
	Emu	
	Kangaroo	
A PART SHARE	Goanna	
	Crocodile	

Image	English Name	Local Original Name
	Koala	
	Possum	
	Dingo	
	Platypus	

YEAR 1 Episode 1: Two Truths



Mathematics

This episode conveys mathematical concepts such as *size*, *distance in time*, *age*, and *shapes*. During this episode, Ms Chen explains that Scientists think a meteorite crashed into the Earth making 'Gosse Bluff' *'millions of years ago'*. In another scene, Little J and Levi are counting on their fingers and Big Cuz says, 'even if you, me and Levi counted on all our fingers, we don't have enough to count to one hundred million', and Levi says 'yeah, the crater is probably as old as your Nanna and my Grandpa'. Big Cuz responds, 'It's way way older than Nanna and Grandpa put together!'

You could pose these **prompting question** to your class:

- "Do you think there are enough fingers on all of OUR hands to count to one hundred million?"
- "If we add up all of our ages, do you think the crater is older than all of us put together?"

Potential activity: During the episode, Big Cuz asks "How big is this crater Nanna?" and she replies "Not sure... Maybe a hundred footy ovals could fit inside?". You could use a picture of an AFL field (oval), an NRL field (rectangle) and the crater (approximate circle) to teach students about shapes. There are also opportunities to begin explaining length and capacity, by exploring the area of each of these, in response to the estimate of 'maybe a hundred' footy ovals from Nanna.

The approximate measurements of these are:

- Tnorala (Gosse Bluff) diameter: 22km. area: 1520.5308443375 kilometers2 (1520530.8443375 meters2)
- AFL field length: 100m. width: 80m. Area: 6283.1853071796 meters²
- NRL field length: 100m. width: 68m. Area: 6800 meters²

The approximate number of times the area of an AFL oval could fit into the crater is: 242 and the approximate number of times the area of an NRL field could is: 223

You may choose to utilise ovals, rectangles, and circles as linked to this episode for students to build familiarity, recognition and descriptive skills with these shapes. An example worksheet is provided on the following page for your convenience (worksheet 1). You may also choose to draw or make a diagram or model of the crater and fields in order to demonstrate the size difference, to begin building an understanding of direct comparisons. These have also been provided on the following page for convenience (worksheet 2).

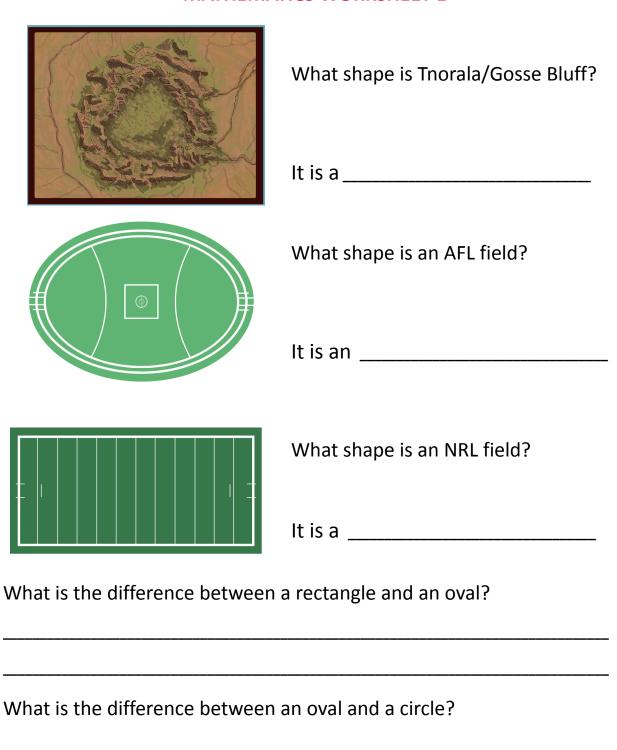
Links to the Australian Curriculum:

Code	Students learn to:
AC9M1A02	recognise, continue and create pattern sequences, with numbers, symbols, shapes and objects, formed by skip counting, initially by twos, fives and tens
AC9M1M01	compare directly and indirectly and order objects and events using attributes of length, mass, capacity and duration, communicating reasoning
AC9M1M02	measure the length of shapes and objects using informal units, recognising that units need to be uniform and used end-to-end
AC9M1SP01	make, compare and classify familiar shapes; recognise familiar shapes and objects in the environment, identifying the similarities and differences between them

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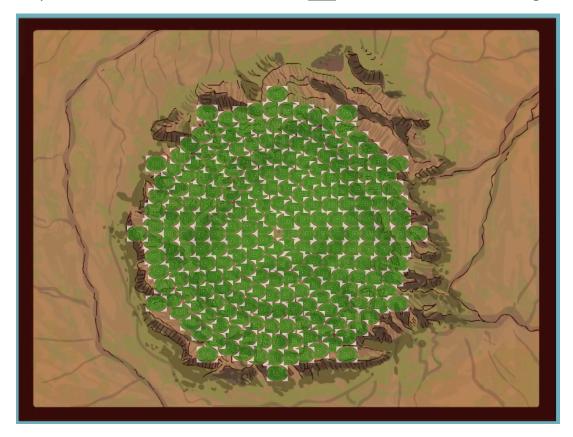
MATHEMATICS WORKSHEET 1



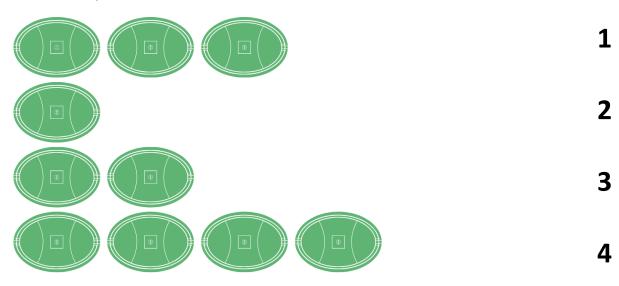


MATHEMATICS WORKSHEET 2

This is a picture of Tnorala/Gosse Bluff with 242 AFL fields to show how big it is!



How many AFL fields are there? Count them and connect them to the correct number!



YEAR 1 Episode 1: Two Truths



Science

This episode includes many scientific themes appropriate for Foundation Year and above. The most obvious aspect of this is the impact of a meteorite ie. a crater. There is an opportunity to guide students to engage in investigations safely and make observations using their senses.

We have designed an activity to supplement student learning about experiments, based on the idea of craters. For this activity, you will need the following resources:

- three different sized balls (we suggest a soccer ball, tennis ball, and a marble)
- a container / tub of sand, or loose dirt, big enough to drop each of the balls into without the ball touching the sides. (you could also choose to do this activity outside on the earth).
- copies of the worksheet provided on the following page, and pencils for the students.
- a ruler or measuring tape.

The experiment:

This experiment involves the teacher/educator gathering students in a circle/semi circle to observe the experiment. The teacher/educator will then drop different sized balls from the same height, and measure the diameter of the 'crater' each ball leaves. Students will be asked to guess which ball will leave a crater that is "big", "medium" or "small".

Start by guiding students to write their 'predictions' in the appropriate column on their worksheet. "Which ball do you think will leave the biggest crater?". Make sure you allow time to respond to any questions, or to question students on their predictions.

Then, after smoothing the sand/dirt, drop one of the balls, measure the crater, and take note of the size. Repeat for the additional balls. Guide students in filling out the 'observations' column on the worksheet. Lead a group discussion, calling on students to see whose predictions aligned with the observations.

This activity will help them build towards an understanding of gravity, and ideas of push/pull, but mainly builds their observation and prediction skills.

Code	Students learn to:
AC9S1U03	describe pushes and pulls in terms of strength and direction and predict the effect of these forces on objects' motion and shape
AC9S1I01	pose questions to explore observed simple patterns and relationships and make predictions based on experiences
AC9S1I02	suggest and follow safe procedures to investigate questions and test predictions





SCIENCE WORKSHEET

Will the crater be BIG, MEDIUM or SMALL?

Which ball?	Prediction (My guess)	Observation (What I saw)

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Health & Physical Education

This episode features emotions such as *embarrassment* or *shame* as experienced by Little J in regard to Nanna sharing a Western Arrernte story. He ends up feeling happy and excited when he realises his classmates all enjoy hearing from Nanna, and that Nanna's story is also respected by the other adults. This episode gives opportunity for teachers to have holistic conversations with students to help them build their sense of identity and understanding of self. Along with this, students can be guided to explore, understand, and communicate their emotions.

You may choose to use the following **prompting questions**, to start a conversation based on Little J's emotional expression, and creating space for children to share their own experiences of emotions:

Questions about feelings:

- "How do you think he was feeling when Nanna was going to share the story?"
 - (Answer: Little J might have been feeling nervous and embarrassed)
- "Why do you think Little J was feeling embarrassed about Nanna sharing story?"
 - (Answer: He might have thought that Uncle Mick, Ms Chen, and his classmates wouldn't like the story or would think Nanna's story was wrong.)
- "Have any of you ever felt embarrassed? I know I have felt embarrassed before!"
 - Using wording that normalises having feelings is good pedagogy, as it allows students to feel related to you.
- "Does anyone want to tell us about a time that they have felt embarrassed? Or have any suggestions about what sort of things make people feel embarrassed?
 - Be sure to share your own story (or make one up). It can be helpful to share something relatable like feeling embarrassed when you don't know the answer to a question, but that it's important to try again.
- "What can you do in situations where you might feel embarrassed?"
 - (Answer: recognise that you are feeling embarrassed and that it's okay to feel that way, but that sometimes it's best to share how you're feeling with someone you trust, like your teacher or your friend. There are lots of situations that can make us feel all sorts of ways).
- "Who would like to share about a situation that made you feel happy?"

Questions about respect:

- "When did Little J feel happy?"
 - (Answer: When he realised that his classmates, Uncle Mick, and Ms Chen all respected and enjoyed Nanna sharing the Western Arrernte story about Tnorala)



• "Do you think Little J was interested and respectful when Nanna first shared the Western Arrernte story?"

o (Answer: Yes.)

"How can we tell he was respectful?"

o (Answer: he was quiet and was listening).

- "How do we show respect for the people in our lives?"
 - (Answer: we get to know them by listening when they share something about themselves. We ask questions, and learn about each other to show that we care)

Code	Students learn to:
AC9HP2P01	describe their personal qualities and those of others, and explain how they contribute to developing identities
AC9HP2P02	identify and explore skills and strategies to develop respectful relationships
АС9НР2Р03	identify how different situations influence emotional responses



History & Social Sciences

Little J & Big Cuz has an array of characters, who are all related to each other in one way or another, whether they are friends, family, classmates, or community members. In this Episode, some of the children refer to Mick as 'Uncle Mick' which is an indication of his relationship to the children as a respected community member, not necessarily the European understanding of what it means to be an Uncle (ie. by blood). Similarly, the family unit Little J, Big Cuz and Nanna is not what would be considered 'traditional' in some cultures, but to many Aboriginal and Torres Strait Islander cultures, this is pretty normal!

These relationships are something that can be explored in History and Social Sciences, to encourage students' understandings of both themselves, and other people. On the following page, there is a multiple-choice *worksheet* with four comprehension questions for students to engage with after the guided conversation.

You may choose to use the following **prompting questions**, to start a conversation linked to the episode and based on *family structures and roles:*

- "Why do you think some of the kids refer to Mick as 'Uncle Mick'?"
 - (Answer: Calling someone Uncle or Aunty is a sign of respect in many First Nations cultures. This might be different or the same as why you call people Aunty or Uncle)
- "Who do Little J and Big Cuz live with? Do Little J and Big Cuz live with their parents?"
 - (Answer: No, they live with Nanna and Old Dog. Nanna is the adult in their family, and that's pretty special for them because Nanna is very kind and has a lot of knowledge).
- "Lots of kids live with different family members, or sometimes they live with carers who they're not related to. All family structures are special and important. Does anyone want to share about who they live with?"

You may choose to use the following **prompting questions**, to start a conversation linked to the episode and based on *how places change and how they can be cared for by different groups:*

- "Did you know that Tnorala has changed since it was first created? The crater used to be HUGE, but it has gotten smaller over time due to erosion. Does anyone know what Erosion is?"
 - (Answer: Erosion is when wind, water, or ice slowly wear away rocks and soil, moving them to new places. It's like how waves can make a sandcastle disappear or how rain can wash away dirt from a path. Over time, erosion can change the shape of the land around us).
- "The Northern Territory Government and Western Arrernte People have an agreement and care for Tnorala together. Why do you think it's important that non-Indigenous people and First Nations people work together?"
 - (Answer: Every person that lives here needs to take care of the environment, and First Nations people hold special knowledge that can help care for Country. It's important for everybody to share the responsibility of caring for the planet).

Resources developed by Dakota Jericho Smith with special thanks to Priscilla Reid-Loynes, whose contributions to this and previous seasons have been integral to this work.

For show credits and more info, click here For teachers' resources from previous seasons, click here



History

Code	Students learn to:
AC9HS1K01	differences in family structures and roles today, and how these have changed or remained the same over time
AC9HS1K03	the natural, managed and constructed features of local places, and their location
AC9HS1K04	how places change and how they can be cared for by different groups including First Nations Australians
AC9HS2K01	a local individual, group, place or building and the reasons for their importance, including social, cultural or spiritual significance
AC9HS2K03	how places can be spatially represented in geographical divisions from local to regional to state/territory, and how people and places are interconnected across those scales
AC9HS2K04	the interconnections of First Nations Australians to a local Country/Place



HISTORY AND SOCIAL SCIENCE WORKSHEET

Learning About Tnorala/Gosse Bluff. Tick the correct answer.

- 1. What do Scientists say fell from the sky?
 - A rock
 - A meteor
 - A star
- 2. What does the Western Arrernte story say fell from the sky?
 - A Woman
 - A rock
 - A baby carrier
- 3. What did the meteor/baby carrier do to the ground?
 - Made a river
 - Made a crater
 - Made a mountain
- 4. Do you think it is important to work together to care for sacred sites like Tnorala? Why?
 - No, because people can do whatever they want.
 - I'm not sure.
 - Yes, because it is everyone's responsibility to take care of the environment, and sacred sites are part of the environment!

