

AUSTRALIAN DINOSAURS

Australia Post Collecting Month

ROARING INTO THE CRETACEOUS PERIOD!

TEACHER
GUIDE

Lower Primary
Years 1-3



The Australian Dinosaurs Teacher Guide is a fun and engaging resource for teaching students about the Australian Age of Dinosaurs, featured in a new series of stamps by Australia Post.

Developed by Australia Post, this curriculum-aligned resource for lower primary will help you and your students about learn the history of prehistoric Australia.

BACKGROUND

Investigating stamps is a great way to learn about Australia's rich history. This year, Australia Post has focused Stamp Collecting Month on Australian dinosaurs, after the 2021 naming of a dinosaur discovered in Queensland, *Australotitan cooperensis* (affectionately known as Cooper before this). The dinosaurs found deep within the landscape of Australia are evidence of the country's prehistoric history and bring with them a wealth of interesting facts and stories.

LESSON STRUCTURE

Each activity in this guide has been designed for teachers to pick and choose what is most suitable for their current programming requirements and student ability levels. There is no set duration for the experiences, some tasks will take longer than a single lesson and educators are encourage to adapt where needed.

LESSON	LEARNING AREA
1 Evolving Dinos Years 2-3	<p>Science - Biological Sciences Living things grow, change and have offspring similar to themselves (ACSSU030)</p> <p>Visual Arts Use and experiment with different materials, techniques, technologies and processes to make artworks (ACAVAM107)</p> <p>Design and Technologies Explore the characteristics and properties of materials and components that are used to produce designed solutions (ACTDEK004)</p>
2 Prehistoric Poets Year 3	<p>English - Creating Texts Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose (ACELY1682)</p> <p>English - Examining Literature Discuss the nature and effects of some language devices used to enhance meaning and shape the reader's reaction, including rhythm and onomatopoeia in poetry and prose (ACELT1600)</p>
3 Winged Warriors Year 1	<p>Science - Biological Sciences Living things have a variety of external features (ACSSU017)</p>
4 Prehistoric Australia Year 1	<p>History - Researching Sequence familiar objects and events (ACHASSI021)</p> <p>History - Evaluating and Reflecting Sort and record information and data, including location, in tables and on plans and labelled maps (ACHASSI020)</p>
5 Digging for Dinosaurs Year 2	<p>History - Questioning Pose questions about past and present objects, people, places and events (ACHASSI034)</p> <p>History - Evaluating and Reflecting Reflect on learning to propose how to care for places and sites that are important or significant (ACHASSI042)</p> <p>History - Communicating Present narratives, information and findings in oral, graphic and written forms using simple terms to denote the passing of time and to describe direction and location (ACHASSI043)</p>

General Capabilities

- Literacy
- Numeracy
- Critical and Creative Thinking
- Information and Communication Technology Capability
- Personal and Social Capability

Cross-Curriculum Priority

- Sustainability

01.1

The biosphere is a dynamic system providing conditions that sustain life on Earth.

01.2

All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.

01.9

Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.

Diamantinasaurus matildae

Di-ah-man-teen-ah-sore-us mah-till-day

Type

Titanosaurian sauropod.

Period

Mid-Cretaceous period, around 100 to 95 million years ago.

Discovered

Central Queensland near Winton in 2005. 30 per cent of the skeleton has been recovered, making it the most complete Cretaceous sauropod ever found in Australia.

Appearance and Interesting Facts

A plant eater, or herbivore. This huge, four-legged, long-necked dinosaur is estimated to have measured 16-20 metres in length and 2.5-3 metres tall at the hips; at the head it would have been 7 metres or more. Nicknamed 'Matilda' after 'Waltzing Matilda' which Banjo Paterson wrote in Winton.



TEACHER GUIDE

MEET THE PREHISTORIC CREATURES

Australovenator wintonensis

Oss-trah-low-ven-ah-tore win-ton-enn-siss

Type

A megaraptorid theropod.

Period

Mid-Cretaceous period, around 100 to 95 million years ago.

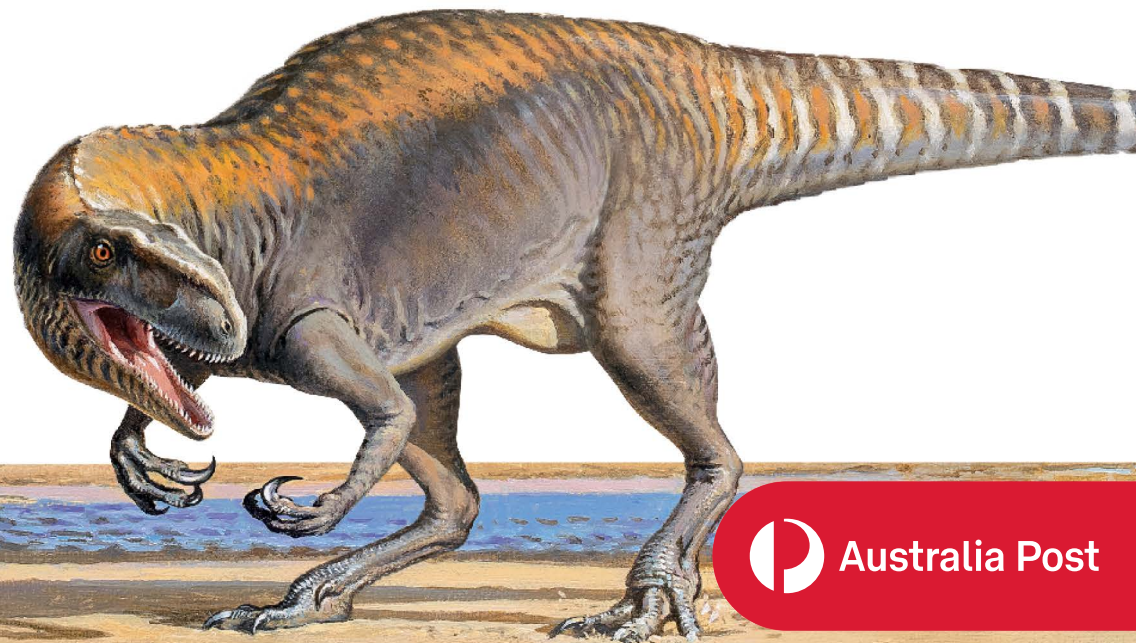
Discovered

Found near Winton, Queensland. 20 per cent of the skeleton has been recovered, making it the most complete carnivorous dinosaur ever found in Australia.

Appearance and Interesting Facts

A two-legged (bipedal) dinosaur, its arms were shorter than its legs. But as theropods go, the arms of *Australovenator* were rather long and muscular. Measuring 1.5 metres high and 5-6 metres long. As a swift predator, it was equipped with three curved claws on each hand and sharp teeth.

Nicknamed 'Banjo' as its skeleton was found intermingled with the bones of the *Diamantinasaurus* specimen nicknamed 'Matilda'. A claw of this dinosaur was also found in Early Cretaceous rocks of Victoria.



Ferrodraco lentoni

Fair-row-dray-co len-ton-eye

Type

An anhanguerian pterosaur (interestingly, this is not a dinosaur but a flying reptile).

Period

Late-Cretaceous period, around 96 million years ago.

Discovered

In the Winton region of central western Queensland in 2017.

Appearance and Interesting Facts

This flying reptile had a wingspan of about 4 metres and lived around lakes and rivers eating mainly fish. This new fossil discovery includes a partial skull, five partial neck vertebrae, and bones from both the left and right wings.



Kunbarrasaurus ieversi

Kuhn-bah-rah-sore-uss eye-vers-eye

Type

A parankylosaurian ankylosaur.

Period

Early Cretaceous period, 103-101 million years ago.

Discovered

In 1989 near Richmond in north-western Queensland. It is the most complete ankylosaurian skeleton from the entirety of the Gondwanan continents.

Appearance and Interesting Facts

A squat, armoured plant eater. About the size of a sheep with a parrot-like beak. Covered in bony armour on the head, back, abdomen, legs and along its long tail. The remains of this individual's last meal were found in its stomach region.



Elaphrosaurine theropod

EL-ah-fro-SAWR-eene theh-ruh-pod

Type

An elaphrosaurine theropod dinosaur. It is related to Elaphrosaurus from Tanzania, Limusaurus from China, and Huinculsaurus from Argentina. It is not yet assigned to any genus because of its incompleteness.

Period

Early Cretaceous period, around 110 to 107 years ago. During this period, the climate of the Cape Otway region was cold, indicating that this animal could tolerate near-polar temperatures.

Discovered

Cape Otway in Victoria in 2015.

Appearance and Interesting Facts

A slender body, long neck, stubby arms and possibly toothless skull. It probably had a plant-based diet and did not hunt prey. Evidence suggests that the elaphrosaurine theropods started life eating a range of foods, including possibly tiny monotremes, insects and fruits, but lost their teeth as they aged, to be replaced by a horny beak.



ACTIVITY 1

EVOLVING DINOS

ACTIVITY OVERVIEW

In Evolving Dinos, students will investigate the physical features of *Kunbarrasaurus* - particularly the function of their armoured body, ears and beak. As a creative task, students will use recycled materials to create their own model of a *Kunbarrasaurus*.

Learning Intentions

In this lesson students will:

- discuss the different characteristics of a dinosaur's physical body and why these physical features were needed
- use recycled materials/household materials to create their own model of a *Kunbarrasaurus*

Guiding Questions

Comprehend

What modern animals look like the Kunbarrasaurus?

Application

What are the physical features of the Kunbarrasaurus and why were they needed?

Synthesise

How would you design your own Kunbarrasaurus using recycled materials?

You will need:

- Egg cartons
- Paints or coloured pens/pencils
- Scissors
- Tape or glue
- *Kunbarrasaurus* fact card

Vocabulary

- armoured
- beak
- herbivore
- physical features
- squat
- *Kunbarrasaurus*

ACTIVITY 1 EVOLVING DINOS

Step 1 - Learn

Read the *Kunbarrasaurus* fact card.

Step 2 - Think

What other animals do you think look similar to the *Kunbarrasaurus*?

Why might *Kunbarrasaurus* have needed such bony armour on their heads?

If the *Kunbarrasaurus* ate plants, why did it need a parrot-like beak?

Step 3 - Create

Use recycled materials to construct your own *Kunbarrasaurus*.

Step 4 - Go Further

Design and build your own diorama of the habitat in which *Kunbarrasaurus* would have lived. Think about the types of food, shelter and land features.

When you have finished, put your constructed *Kunbarrasaurus* inside.



ACTIVITY 2

DINOSAUR SHAPES

ACTIVITY OVERVIEW

In this activity, students will read the descriptions of the Australian dinosaurs and pterosaur, and use the stamps to observe their visual appearance. Students will then discuss shape (concrete) poems in order to compose their own imaginative shape poem on a dinosaur of their choosing.

Learning Intentions

In this lesson students will:

- write an imaginative shape poem about a dinosaur or pterosaur
- develop their writing by using literary devices

Guiding Questions

Comprehend

What is a shape poem?

Application

Why do poets use different writing techniques?

Synthesise

How can you create a shape poem about an Australian dinosaur?

You will need:

- Shape Poetry worksheets
- Pens or pencils
- Prehistoric fact cards

Vocabulary

- shape poem
- simile
- onomatopoeia
- literary devices
- dinosaur
- pterosaur

ACTIVITY 2

DINOSAUR SHAPES



Step 1 - Learn

A shape poem is a poem written in the physical shape of what the poem is about.



Step 2 - Think

Why would people write a poem in the shape of something?

What kind of planning would you need to do to make a shape poem work?

Would you start by writing the words, or drawing the outline of the shape?

Step 4 - Go Further

Take your shape poem and try rewriting it in a different form of poetry.

Ask your teacher to help you find a poetry competition and enter your shape poem. Think about the competition rules and if you need to adjust your poem to fit. For example, is there a minimum word length?

Step 3 - Write

After looking at the images and reading about each of the dinosaurs, use the Shape Poetry worksheet to write your own shape poem about one of the dinosaurs.

ACTIVITY 3 WINGED WARRIORS

ACTIVITY OVERVIEW

In the Winged Warriors activity, students will begin by exploring the five senses in human beings. They will then identify the body parts of the *Ferrodraco* by labelling these on an outline of the pterosaur and commenting on the function of each body part.

Learning Intentions

In this lesson students will:

- discuss and label the key features of the flying reptile *Ferrodraco*.
- describe the purpose of a *Ferrodraco*'s body parts

Guiding Questions

Comprehend

What is the purpose of the five senses and which body parts do they connect to?

Application

*What was the purpose of the *Ferrodraco*'s wings and other key features of the body?*

Synthesise

*Can you create a diagram of a *Ferrodraco*'s body by labelling the key body parts?*

You will need:

- Ancient Bodies worksheets
- Pens or pencils
- Prehistoric fact cards

Vocabulary

- wings
- function
- Senses
- *Ferrodraco*
- pterosaur

ACTIVITY 3 WINGED WARRIORS



Step 1 - Learn

There are five senses that help us to understand our world. They are

Sight

Touch

Smell

Taste

Hearing

Step 2 - Think

Which parts of your body do the following senses belong to?

Is everyone born with five senses? What happens to your body if you lose a sense?

Step 3 - DO

Use the Ancient Bodies worksheet to label the body parts of the *Ferrodraco*. What is each body part used for?

Hint: Use the *Ferrodraco* fact card to help you!

Step 4 - Go Further

Think about the dinosaurs, might they have had different senses to people? What could they have been?

How do you think it would feel to have super power senses? Imagine having x-ray vision or super sonic hearing. Write a narrative about a character with super senses that travels back to the era of the dinosaurs.

ACTIVITY 4

PREHISTORIC AUSTRALIA

ACTIVITY OVERVIEW

This activity asks students to discuss different time periods in which the five featured Australian prehistoric creatures lived. Students discuss the Cretaceous period and complete a timeline sequencing activity to map out when the dinosaurs roamed Australian soil.

Learning Intentions

In this lesson students will:

- discuss the time periods when dinosaurs walked the land and pterosaurs soared across the skies
- complete a timeline to show which period the five Australian prehistoric creatures lived.

Guiding Questions

Comprehend

What is it a timeline?

Application

What evidence can you find to help you understand when each Australian dinosaur lived?

Synthesise

Can you create a timeline to show the period when Australian dinosaurs lived?

You will need:

- Timeline templates
- Prehistoric fact cards
- Scissors
- Glue
- Pens or pencils

Vocabulary

- supercontinent
- Gondwana
- Cretaceous period
- Jurassic period

ACTIVITY 4 PREHISTORIC AUSTRALIA



Step 1 - Learn

200 million years ago Australia was connected to Antarctica, which was in turn connected to South America, Africa, Madagascar and India.

This was known as Gondwana and it was a supercontinent.

Many different animals and dinosaurs lived and died during this time.

Step 2 - Think

What would be different between Gondwana and Australia today?

Step 3 - Create

Use the Timeline template, to write down or draw a picture to show when each creature lived.

Hint: You will need to use the prehistoric fact cards to help you in this task.

Step 4 - Go Further

Imagine that dinosaurs still existed on our planet today, and that we humans had to live with them. How might our world look different?

*Interesting fact

Technically they still do - birds are dinosaurs, after all!



ACTIVITY 5

DIGGING DOWN UNDER

ACTIVITY OVERVIEW

In this activity, students discuss the job of a palaeontologist. Focusing on the elaphrosaurine theropod, they will investigate where this dinosaur was found and what this place reveals about the Australia's past. Students design and write a postcard from the perspective of a paleontologist to inform a museum about their latest discovery.

Learning Intentions

In this lesson students will:

- discuss the role of a palaeontologist
- understand the importance of place
- write creatively from a different perspective

Guiding Questions

Comprehend

Who are palaeontologists and what do they do?

Application

How does the natural environment assist with new discoveries?

Synthesise

How can you recreate the voice of a palaeontologist?

You will need:

- Pens or pencils
- Paper
- Prehistoric fact cards

Vocabulary

- palaeontologist
- perspective
- elaphrosaurine theropod
- fossils
- erosion

ACTIVITY 5 DIGGING DOWN UNDER



Step 1 - Learn

A palaeontologist is someone who studies the history of life on earth.

They do this by looking at fossils.

Many dinosaur fossils have been found in Australia.

The rocks on the Victorian coastline where the elaphrosaurine theropod was found are eroding due to the waves washing over them again and again.

Step 2 - Think

How might the sea and erosion help with new discoveries?

Use your dino fact card to learn where the elaphrosaurine theropod was discovered?

Step 3 - Imagine

Imagine you are a palaeontologist and have just made a new discovery.

Write a letter to a museum to tell them all about your latest dinosaur discovery.

Hint: Don't forget to include a labelled diagram of your creature.

Step 4 - Go Further

Take an old spoon and paintbrush into your garden, or go for a nature walk around school. Dig around with the spoon to see if you can find some interesting rocks or stones.

Use the old paintbrush to clean away the dust, look carefully. Can you spot any unusual markings that might make it a fossil. Ask an adult to check.



STUDENT LED TASK

INDEPENDENT LEARNING

The following task is a student-led activity that can be completed independently, in small groups or as a homework task.

Designer Dinosaurs

Students complete the Dinosaur Stamp Colouring Task.

Extension

Ask students to write a short rationale that explains the design choices they made. For example: I chose the colour green to show that this dinosaur is a herbivore.



A U S T R A L I A N **DINOSAURS**

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*Stamp illustration: Peter Trusler. Images: © Australian Age of Dinosaurs
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