Western Australian Museum
Perth

Teacher Resource



11 April 2014 – 3 August 2014 museum.wa.gov.au/museums/perth/dinosaur-discovery-perth



Self-guided Experience

Overview :	Dinosaur Discovery: Lost Creatures of the Cretaceous gives students a close
	encounter with some of the most extraordinary creatures to ever walk the earth!

Duration : Approximately 30-45 mins to experience the exhibition.

Your group/s are welcome to explore the remainder of the Museum's galleries before or after viewing the *Dinosaur Discovery: Lost Creatures of the Cretaceous* exhibition. We recommend that teachers become familiar with the Museum's layout and collections by visiting the Museum prior to their excursion date.

What your class will experience:

The exhibition features more than 20 moving, life-size models of dinosaurs from 145-65 million years ago, including the ever-popular T-Rex and a 16 metre long Brachiosaurus. There will also be fossils and dinosaur specimens to touch and feel, and a 'Play-laeontology Zone' in the museum grounds where children can enjoy a range of informative, hands-on activities. In addition to the dinosaurs, this exhibition features cutting edge 3D augmented reality technology not seen before in Western Australia.

What your class will experience:

For information on *Dinosaur Discovery: Lost Creatures of the Cretaceous*, visit the exhibition website at **museum.wa.gov.au/museums/perth/dinosaur-discovery-perth**

Planning your excursion to Dinosaur Discovery: Lost Creatures of the Cretaceous

To assist with your excursion the following documents are available to download.

- > Dinosaur Discovery: Lost Creatures of the Cretaceous Excursion Essentials
- > Excursion Management Plan

Available online at museum.wa.gov.au/museums/perth/dinosaur-discovery-perth/education

Excursion Booking and Enquiries:

Excursion bookings can be made online at **museum.wa.gov.au/explore/education/perth** For any enquiries related to *Dinosaur Discovery: Lost Creatures of the Cretaceous*, please contact:

WA Museum Customer Relations Officer

Phone: 1300 134 081Email: education @museum.wa.gov.auPlease refer to museum.wa.gov.au/education for an overview of the range of self-guided experiences available for school groups.



Contents



Teacher Resource

Curriculum Links

Australian Curriculum (F-10) Senior Secondary Syllabus

At the Museum

Self-guided Experience **Related Museum Resources**

At School

Classroom Activities



3

4

5

Curriculum Links



Australian Curriculum (F-10)

Dinosaur Discovery: Lost Creatures of the Cretaceous may be integrated into the Science learning area as indicated below:

> Science

- > Science Understanding (Biological Sciences)
- > Science Understanding (Earth and Space Sciences)
- > Science as a Human Endeavor (Nature and Development of Science)
- > Science Inquiry Skills



Senior Secondary Syllabus

- > Biological Sciences
- > Earth and Environmental Science

Thematically, the exhibition presents opportunities for integration into several learning areas, including:

- > English
- > Mathematics
- The Arts
- Technologies



At the Museum



Self-guided Experience

Approximately 30-45 minutes

As we expect higher than usual visitation to the Museum to view the *Dinosaur Discovery: Lost Creatures of the Cretaceous* exhibition, it is essential that all teachers, students and adult helpers are familiar with exhibition rules and safety information before entering.

Please split your class/es into small groups of no more than ten students as we need to manage capacity for this exhibition. Each group should be allocated an adult leader.



Styracosaurus

At School



Classroom Activities

Below is a list of activity ideas which link in to the *Dinosaur Discovery: Lost Creatures of the Cretaceous* exhibition.

- > Plant it: Research which modern plants also grew in the cretaceous period, and then design a dinosaur garden. Maybe there's even a spot around the school where you could grow the plants?
- Job description: Being a palaeontologist is a fascinating job. Consider the different aspects of the work of a 'dinosaur expert' and then write a job description, considering what skills they will need, what they will do as part of their daily work, what tools they will use etc.
- I dig it! Pretend that you are a palaeontologist who has just returned from a dig in Africa. You have discovered a very important artefact, which has created great excitement in your professional circle. Pretend you are being interviewed on a current affairs program, and develop the Interviewer's questions along with the Interviewee's responses. Students could role play this transcript.
- > Measurement: Estimate the size of different dinosaurs using hands and feet. Later, convert the measurements to real units, and graph the results. Compare dinosaur sizes to each other, or work out the mean, mode and median of each data set.
- Scale it! Research the size of different dinosaurs (or, as above 'measure' the dinosaurs in the exhibition), then draw, build or sculpt a dinosaur specimen to scale.
- Compare and contrast: Create a Venn diagram comparing dinosaurs to birds and reptiles.
- **SuperDino!** Create a comic strip depicting a dinosaur using at least two of their adaptations to survive. Pit them against an adversary to showcase their adaptations too.
- Set the scene: Create a model of a dinosaur habitat, paying special attention to include all of the elements a dinosaur would need in its habitat to survive.
- Working with the past: Draw a timeline showing the key milestones in the study of palaeontology – include the first discoveries, development on significant techniques and emergence of key theories.
- > Now and then: Show students pictures of animals in their habitat, and have them point out characteristics and come up with ideas about how the animal might use that characteristic to survive in their home. Later, construct a T chart, comparing modern day animals and their characteristics to specific dinosaur characteristics.
- Review it: You've been asked to evaluate the exhibition for either a technology, scientific, cultural/arts or education magazine. Choose two of these magazine genres and write a review of the exhibition. How does the focus of your writing differ in the two reviews?

If dinos had TV: Transport yourself and your TV crew 66 million years into the past and create a special 'doomsday' report on the impending asteroid impact. Remember, your target audience are dinosaurs. Make sure to explain what is likely to happen, offer hints on how to try to survive it e.g. burrow underground, and speculate what the long-term consequences might be.

Side by side: Create two posters – one which illustrates a dinosaur ecosystem, the other a similar ecosystem, but using present day plants and animals.

> The times are a changin': Design a timeline or a collage showing different prehistoric period and the evolution of different types of dinosaurs.

Dinner with a twist: Your task is to develop the menu and seating plan for a dinner party for all of the animals within a particular dinosaur ecosystem. Are you up for a challenge as it is going to be difficult! What would you serve to whom? Who would you avoid sitting next to each other and why? Have some fun and role play the mayhem!

> I depend on you: Write a short story in which a prehistoric creature learns the extent to which they depend on another creature or something in their environment.

> Cretaceous food chain: In small groups, create a cretaceous food chain illustrating some real species of the time and the role they play. Get creative with how the chain is presented e.g. role play, charts, film etc.

Study of the nitty gritty: Research the range of trace fossils (coprolite, footprints, eggs), and in a chart/diagram detail what we can learn about the behaviour, diet, breeding etc. of dinosaurs that their bones alone can't tell us.

What next?: Consider tectonic plate movement. What might the planet look like in 100 million years' time? How might Australia's environment change and how could our animals adapt and evolve as a consequence? Make your own hypotheses, and present plausible justification for your theories.

> What if it happened today?: Consider the impact or rising sea levels or even another asteroid event. What would the impact be on people and animals? Think about both the environmental and social changes.

Show me the money: Estimate the number of people at the exhibition on your visit, then work out how much money the Museum might have earned that day/that week/over the course of the exhibition through ticket sales. What costs need to be covered before you can have a better idea of the overall profitability of the exhibition?