



# Fossils

## Primary Years - Teacher notes



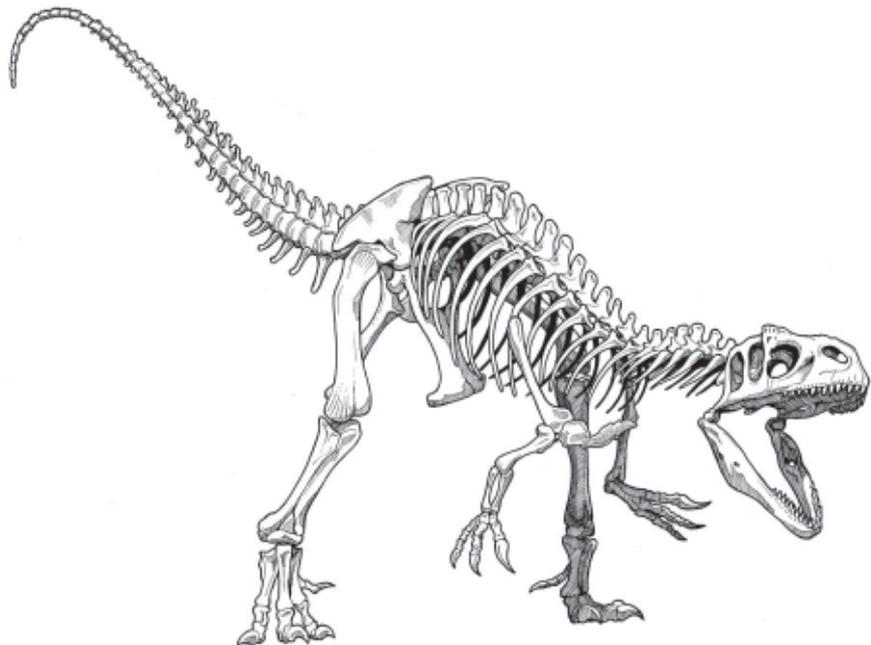
Government of South Australia  
Department of Education and  
Children's Services

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South Australian Museum Education Program

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## Visiting the museum

### Student expectations

**We would like you, and all our visitors, to enjoy visiting the museum.**

- Please stay with your group.
- Walk safely around the exhibitions to see all the best parts.
- Share the space with other visitors.
- Talking is an important part of learning. Please remember to use a quiet voice.
- The museum glass cases can get dirty or scratched. Please enjoy looking without touching.
- Please use the stairs and avoid the lifts. (They are slow and are needed by people who can't use the stairs.)
- Help keep the museum clean. Please eat and drink outside on the lawns.



## Visiting the museum

### Teacher expectations

**Bookings are essential for all school visits to the museum.**

Please supervise your groups of learners at all times. If your visit involves visiting more than one gallery, divide your class into small supervised groups. Respect the needs of other classes that have booked particular galleries. **Parents must specifically consent to students under 18 participating in activities involving indirect supervision.**

When you arrive please let the staff at the front desk know. If the weather is fine, your students can enjoy the outside lawn area while they wait.

Do not use clipboards with metal backings and clips. For your convenience and for the safety of our exhibits, cardboard backings are available at the front desk.

The coffee shop and the museum shop do not cater for large groups. Small groups can visit, with adult supervision. Bags must not be taken into either shop.

Only students with special needs should use the lifts. (Many students visit the museum and using the lifts would cause excessive delays for people who really need them.)

**Unfortunately the museum has limited capacity to store bags. A large crate or two for lunches is easier to keep secure.**

**Supervisors' bags must be left at the security desk, or be inspected and tagged by the security officers.**

### Program introduction

The Allosaurus is back! Its skeleton is now mounted on the top of the museum security desk near the entrance and greets students before they set off on discovery programs.

Students visiting the Origin Energy Fossil Gallery can travel back in time and discover opalised fossils of plesiosaurs, ichthyosaurs, ammonites and diverse shells from the Age of the Dinosaurs.

In a new display about Ediacaran fossils from the Flinders Ranges, students will discover fossils of ancient animals such as the *Dickinsonia costata* which looked like a flat worm and had a soft body. They were buried here in an ancient sea bed approximately 560 million years ago which makes them some of the world's oldest animal fossils.

### Program aims

This program builds on childrens' fascination with dinosaurs and introduces them to the extraordinary life-forms that have inhabited South Australia in the past. It is based on the development of Essential Learnings, in particular **Interdependence**, **Thinking** skills and **Future** perspectives.

Students will:

- develop a basic understanding of the way scientists use evidence to build a picture of past life on Earth;
- investigate how the environment in South Australia has changed and the impact upon life of the past;
- discuss thier ideas and perceptions about the future, particularly relating to extinctions, environmental sustainability and maintaining biodiversity.

### Curriculum links

These teaching and learning programs are linked to the SACSA framework for **Science** and **Society & Environment**.

#### Science - Key Idea

##### Life systems

Students pose questions and seek explanations about the internal and external features of living things in order to better understand the supports of life in particular environments. (In) (T) (C) (KC6).

- children observe and identify similarities and differences in the structures of living things—extending this comparison through time.

#### Society and Environment - Key Idea

##### Time, continuity and change

Students recognise the importance of collecting and evaluating information and source material as evidence, consider other points of view, and arrive at justifiable conclusions. (T) (C) (KC1).

- children learn about palaeontologists' respect for evidence and the need to confirm or challenge current interpretations and be made aware of the importance of scepticism about evidence and scientific arguments.
- students work collaboratively to identify fossils and discover how and why some animals and plants have become extinct (eg dinosaurs and Diprotodons).

Whilst engaging with scientific aspects of the gallery, students can also expand their English skills. The gallery gives examples of some of the ways language is used for different purposes, audiences and contexts. Students can broaden their knowledge of texts. In particular they will have opportunities to read and view a range of texts containing familiar topics and some unfamiliar text structures and language features.



### Museum web links

The museum website has more information about the Origin Energy Fossil Gallery and online activities for students. The address is,  
<http://www.samuseum.sa.gov.au/fossils/fgw1.htm>

**Naracoorte Caves World Heritage** megafauna fossil website:  
<http://www.environment.sa.gov.au/parks/sanpr/naracoortecaves/fossilcentre.html>

**Australian Museums Online** has a very good interactive site for students called **nature culture discover** Students can design their own exhibition using fossils at the following address,  
<http://australianmuseum.net.au/minerals-and-fossils>

### Teaching strategies

If you have booked an **education officer**, they will provide your class with a lesson tailored to suit the learning needs and interests of your students as outlined on your **Booking Confirmation Form** (returned to the museum for confirmation of your booking).

This program can also be **self guided** and the **teacher notes** and **activity sheets** have been designed to complement the fossil program for Primary Years students. Teachers can also arrange access to the hands-on collections by prior arrangement with an Education Officer. A brief training session on how to access and use the collections is a prerequisite and a suitable time to do this can be negotiated by contacting the education office at the museum. Ph: 8207 7429.



Students are encouraged to look around and explore the Origin Energy Fossil Gallery on Level 3 before starting the more structured activities.

A lesson with an **education officer** will last approximately one hour and involve an introduction to the displays using our collections of hands-on specimens which offer a more extensive first-hand experience. Students will be introduced to ideas about:

- the various ways fossils are formed;
- important South Australian fossil finds;
- what we can learn from the fossil record.

After an introduction, your class can be divided into small groups or pairs for follow-up activities.

**Activity sheets** have been designed to assist students interpret the evidence on display in the Fossil Gallery and outside the museum. A range of questions and ways of recording their responses have been designed to accommodate different learning styles.

The **Fossil Clue Card** sheets can be photocopied, cut into two and distributed to children in pairs when in the Origin Energy Fossil Gallery. They can use clues found in the displays to identify a particular extinct animal and answer the questions. Children may like to read out the clues to the rest of the group and they try and guess which extinct animal it is.

A background information sheet suitable for students titled “**Adventures of two young palaeontologists**” is included in this program for use as pre-visit or post-visit activity. An online version is also available on the museum website. <http://www.samuseum.sa.gov.au/fossils/fgw8.htm#detectives>