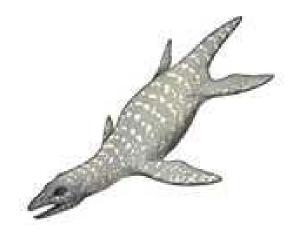
Fossils and a changing Earth

Stage 6 (E and ES)

Dinosaurs, Surviving Australia and Planet of Minerals exhibitions

Self-guided program



Student Activities

Produced by Learning Services, Australian Museum, March 2010

6 College Street, Sydney, NSW 2010 www.australianmuseum.net.au



Fossils and a changing Earth – Student Activities Stage 6

General instructions

- Go to Level 2 of the Australian Museum. Activities 1 4 will be found in the *Dinosaur* exhibition and Activities 5 -6 will be found in the *Surviving Australia* exhibition (Look for these symbols at the top of the page). If you have time, Activity 7 can be completed in the *Planet of Minerals* exhibition.
- **Break into small groups.** Commence one of the following activities. Make sure each group **starts with a different activity** otherwise the displays will be crowded and you will not be able to see and explore them properly. Move onto another activity when complete.
- Exhibition floorplans show the locations of the various sections you will need.

Activity 1: Being a Palaeontologist!



A fossil is evidence of past life. They can give us many clues including the types of species that lived and what the environment was like at a particular time.

At the far right hand end of the exhibition ('Dino Lab') you can see a large slab of rock containing many fossils. This was found in Canada and is a work in progress for palaeontologists. By looking in the drawers and viewing the slide show,

Name the dinosaur which these fossils belong?

- a) How long ago are they believed to have lived? _______

 List three tools a Palaeontologist may use: ______
- b) Sketch (in the box) one fossil found from this dinosaur and name the part of the body it came from (don't forget to add a scale!).

Activity 2: Australian Dinosaur sites!



What happened at Winton, Qld 95 million years ago?
View the large screen on the wall and describe in your own words what the fossil footprints tell us about the environment and the sequence of events that occurred.

Turn around and look at the touchscreens behind you. View the section 'Australian dinosaur fossil sites'. Name another site, other than Qld, where dinosaur fossils have been found and describe the findings there.

Activity 3: Examining two Australian dinosaurs!



Minmi and Muttaburrasaurus are two Australian dinosaurs. Find these dinosaurs and complete the following fact sheets. Why not also take a photo?

stimate of size	m long
	m high
Where did it live? _	
Description of phy	sical features

-	live?
Estimate of size	e <u>m long</u> <u>m high</u>
Where did it liv	re?
Description of _l	physical feature

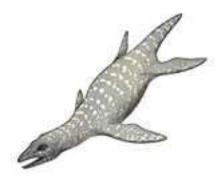
Winny Saur is the Australian Museum's own Muttaburrasaurus puppet. See if you can find her hiding in the exhibition. Why don't you become Winny's friend on Facebook?



Activity 4: A changing World!



1. Find the section describing Australia in the Mesozoic. Imagine you have been teleported back to this time. Write a text message to a friend describing what you see.



Activity 5: Examining Megafauna



1. Go to the **Scientists' stories** mini theatrette. Watch the three minute story about the extinct **Demon Duck of Doom** and its relatives. It reveals some discoveries about an extinct group of giant birds and the work of a Museum scientist.

a) Name the Australian scientist in this story.

b) Describe two facts you learned about the **Demon Duck of Doom.**

2. Go to the Adapt or Die area of the exhibition. Name and draw one extinct carnivore and one extinct herbivore.

Extinct Australian Carnivore

Extinct Australian Herbivore

3. What features of the skull or jaw distinguished the herbivore and carnivore from each other?

Activity 6: Stromatolites and sea level change!



At the top of the stairs near the 'Island Homes' section you will find a large stromatolite. Have a good look at this specimen and read the information.

1. What can these specimens tell us about past sea levels? Discuss.

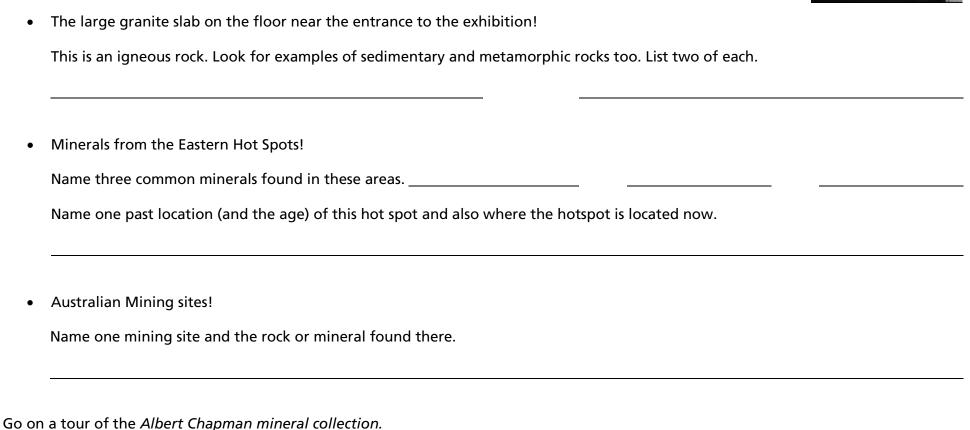
- 2. Look at the touch screen. If sea level increased by 50m, describe what the area would be like:
 - a) where you live?

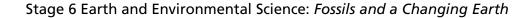
b) in the city?

If you have time?

Activity 7: Mineral Magic







• List two of your favourite minerals, explaining why you chose them.