

## **Biodiversity babies** For group leaders – Year 2

This program for schools is made possible through the partnership between the Department for Education and Child Development and the South Australian Museum. It is part of Outreach Education, a team of DECD educators seconded to public organisations.

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## Biodiversity babies

### Young animals and their parents.

#### Teacher Information

The following cards have been written for parents or other adults to read to students in various parts of the South Australian Museum's Biodiversity Gallery. They focus attention on many examples of animals growing up in the South Australian bush.

#### Links to the Australian Science Curriculum – Year 2

Living things grow, change and have offspring similar to themselves.  
Exploring different characteristics of life stages in animals.  
Observing that all animals have offspring, usually with two parents.

Participate in guided investigations to explore and answer questions, accessing information sources.

#### TfEL

Foster deep understanding.  
Apply learning in authentic contexts.  
Communicate learning in multiple modes.



## Biodiversity babies

### Young animals and their parents.

#### Leader information

After your group has explored the gallery looking for baby animals, collect a card from the class teacher. You only need one card at a time. Each card will direct you to a different part of the gallery. (Use the colour clues to get to the right area.)

Read the *italicised* text on each card to your group, (or say something similar). The card also has other information to help you to assist the students.

When using the cards, please keep your students together as they move through the gallery. They will need a piece of paper, a board to rest the paper upon (available from the museum desk) and a pencil.



This symbol indicates the students can record information on paper.

## Larvae

Find the display ***BETWEEN EGG AND ADULT***

***“Some babies do not look like their parents until they grow up. Many babies look really weird! This display has photographs of some babies and the adults they will grow up to be. The photos were taken through a microscope because the babies are smaller than a full stop.”***



***“Who can find the baby sea worm?”***

If students cannot find it, point it out to them.



***“Who can see the baby abalone?”***

If students cannot find it, point it out to them.

If you get time, point out the clear baby starfish which have been modelled much larger than life-sized. (The real babies are smaller than a full stop!)

## Cuttlefish

Find the cuttlefish video and display.

***“Giant Australian Cuttlefish all have their babies at the same time and gather in a special rocky place to lay their eggs.”***

***“In the video the males are showing off their colours to attract a girlfriend.”***

***“The females lay their eggs in good hiding places. Can you find the eggs?”***

Give the students a chance to look, but if they do not discover the eggs, point out that they are under the rock ledge. (Bend down low to look under the ledge.)



Cuttlefish eggs  
(Looking from floor level.)



Ask the students to draw a cuttlefish egg.

## Sea Lions

Find the family of three Sea Lions

***“In this display there are many eggs, babies and parents. Walk around the case and show your friends the eggs, babies or parents you can find.”***

Walk around the whole case.

***Who can show us a mother and father seal and their baby?”***

***“Which is dad?”*** (The biggest)

***“Which is mum?”***

***“Which is the pup?”*** (The smallest)

These seals are called Australian Sea Lions.



***“Who can show us a mother goose and her goslings (babies) in this display?”***

***“Who can show us a mother gull and her baby? Her baby has grown quite big.”***

The Pacific Gull chick has grown to the same size as its mother, but has not yet grown its adult feathers – so it is brown, not white and grey like its mother.



***“There are two different kinds of eggs in this display. Who can show us the birds’ eggs?”***

If students cannot find the eggs, direct their attention to the taller end of the display. (The small depression in which the eggs lie is often the only nest that the Lapwing makes.)



***“Another egg in this display is from a Port Jackson Shark. It is actually the empty egg shell that washed onto the beach after the baby shark hatched out and swam away. Can you find one?”***



Ask the student to try drawing eggs.

## Cormorants

Find the window with the trees and the Cormorants.

***“In this display you can see many Cormorant families. Which birds do you think are the babies?”***

Let students point out the baby birds and ask why they chose those birds.



Baby cormorants  
(Downy feathers)

***“Which birds do you think are the parents?”***

Let students point out the adult birds.

***“How many baby birds are in this display?”*** Eight

***“What have the parents built for the baby birds to live in?”*** Nests

***“What would be good about living in a nest?”***

***“What would be bad about living in a nest?”***

***“Can anyone see the Cormorants’ eggs?”***

## Travelling parents

Find the small migratory birds in the Mangrove display.

***“Some birds travel a long way to find good sites for their nests.”***

***“Find birds 8 and 11.***

***Do they look like they would be good at flying long distances?”***



Let students find the birds before telling them ...

***“They spend summer here in Australia and then, before it gets cold, they fly thousands of kilometres to make nests in places like the Arctic.”***

***“What would be some of the problems of flying that far?”***



8 = Sharp-tailed Sandpiper



110 = Red-necked Stint

## Pelicans

The pelicans are at the left hand end of a beach exhibit.

*“People can usually tell the difference between men and women just by looking at them.”*

*“People find it harder to tell male Pelicans from female Pelicans. But Pelicans have to tell the difference between males and females so they can get together to have babies. Look carefully and you might notice that male Pelicans have slightly longer bills.”*

*“Which Pelican do you think is a male?”*



## Ducks

*“Look at the Blue-billed Ducks between the Pelicans. One is male, the other is female. In this case it is easy to tell the difference.”*



*“Which do you think is the male? Which one is the female?”*

Let the students guess, then tell them that, in birds, the male is very often the brightest coloured. Does this change their opinion?

## Caterpillars

To the left of the Pelicans is a small video screen.

Ask the students to watch the screen while telling them the following.

*“This video shows some baby moths – which we call caterpillars. They will grow up and turn into moths.”*



*These particular caterpillars play follow-the-leader – each one following the tail of the one in front.*

*Perhaps this makes it hard for a bird to pick out one caterpillar to eat.”*

## Babies in the wetlands

Find the baby birds in the display case with the wading bird eating a frog.



**“There are some baby animals in this display. What are the babies called?”**

Students might answer ducks or ducklings. Let them check their answer on the computer screen. *Number 5 = Australian Wood Duck.*

**“Find the ducklings’ parents. Use the computer screen to check their name.”**  
*Check the number next to the ducks. (6 & 17)*



**“In what ways are the ducklings and their parents the same?”**

**“In what ways are the ducklings and their parents different?”**



**“In what ways are you the same or different to your parents?”**



Ask students to write down three words to describe the ducks.

## Butterflies

Find the butterfly display panels.



**“What do we call a baby butterfly?”**  
Caterpillar

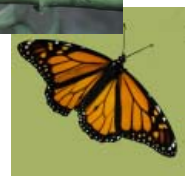
**“What do caterpillars eat?”**  
Leaves. Point out the plants on the panel.

**“What do butterflies eat?”**  
Nectar – the sweet juice in flowers. Point out the flowers on the panel

**“Find the photo of the Monarch caterpillar.”**  
Middle panel



**“Now find the Monarch butterfly that it grows up to be.”**



**“Can you find these babies and adults?”**  
Show the students the two names on this page. See if they can find the names and the pictures of the caterpillars and adults.

**Cabbage White**

**Australian Painted Lady**

## Nests

Find the birds' nests near the sleepy koala.

*“Most birds lay their eggs in nests.  
The chicks grow up in the nest.  
How many nests can you find in this  
window?”*

*“Use the numbers and the computer screens  
to find out the names of the birds that made  
these nests.”*

Nest 69 = Eastern Spinebill

Nest 70 = Red Wattle Bird

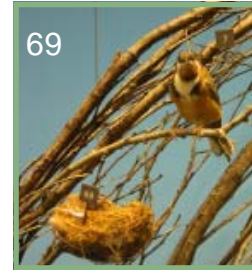
Nest 71 = Magpie Lark

*What is the same about all these nests?*

*What differences can you notice about these  
nests?*



Ask students to write down the name of a  
bird that made one of these nests.



## Forest babies

There are many babies in the case with the Grey Kangaroo.

*“How many babies can you find in this display case?”*



*“Can you find mother bandicoot and her  
family?”*

*These babies once lived in their mum's  
pouch.*

*Why aren't they in her pouch now?”*

*They have grown too big.*



*“Can you find mother possum and her family?  
These babies once lived in their mum's pouch.  
Why aren't they in her pouch now?”*

*They have grown too big.*



*“Would there be any problems with them hanging onto her fur?”*

*“How were you carried around by your parents when you were small?”*



Ask students to write down how many babies each mother has.



## Chicks

Find the father Emu.

**“How many Emu chicks can you see?”**

**“Who is looking after the chicks and eggs?”**

Father Emu. (Female Emus do not sit on the eggs nor do they look after the chicks.)



**“Can you find any other eggs in here?”**

Look underground to find the Mallee Fowl eggs in the mound.

**“Mallee Fowl parents scrape together a huge mound of leaves to cover their nest. Leaves get warmer as they rot and this keeps the eggs warm. The parents keep adding or removing leaves to keep the eggs at the right temperature. When the babies hatch out they have to dig their way out.”**



## Babies in a pouch

Turn around to find young and an embryo of echidnas and kangaroos (in jars).

**“These babies died when they were very young. They were all in their mother’s pouch – except one tiny kangaroo that was still in his mum’s tummy. He died before he was born.”**

Let the students look at the jars.



**“Did you know that Echidnas lay eggs?  
Did you see the Echidna egg?”**



## Big red

### Find the kangaroo family

*“Look at the red Kangaroo family.*

*Which is mum?*

*Which is dad?*

*Where is the joey (baby)?”*

*“Animals like these that carry their babies in a pouch are called marsupials.”*



## Dingos

### The dingoes are on the wall opposite the kangaroos.

*“Dingos are not marsupials.*

*They do not live in mum’s pouch when they are small.*

*In what ways do Dingo pups look like their parents?”*



## Hatchlings

### Look for the snake burrow under the dingos.

*“Some animals start their life by hatching out of eggs.*

*What animal in this display is looking after her eggs?”*

*Snake – Woma Python*



*“Have a look in the drawer next to the dingo pup.*

*What is in it?*

*What animals did they come from?”*



Ask students to write down the names of three other animals that hatch out of eggs.