

### EGGCELLENT EGGLAYERS

A visit to Currumbin Wildlife Sanctuary provides a holistic experience where the curriculum area is presented using real world examples and encounters, creating a meaningful teaching and learning experience.

By combining the knowledge from one of our experienced education officers, with the experience of "seeing" the curriculum, students will become engaged in the topic area.

Students will see practical examples of the lifecycles of living things.

YEAR LEVEL: Year 3/46, Stage 2

<u>DESCRIPTION</u>: Living things have life cycles and the biological clock of an animal varies significantly from species to species. In our Eggcellent Egg Layers lesson, students will discover the main life stages of some egg-laying animals, exploring exactly what a life cycle is and compare and contrast how life cycles can be different between species.

<u>EXCLUSION FORMAT</u>: This excursion provides a mix of self-guided activities as well as a lesson presented by one of our educators. Students will be able to meet some of our animals and visually see some life cycle stages in action.

#### AUSTRALIAN CURRICULUM LINKS:

YEAR 3: ACSSU044

YEAR 4: ACSSU072, ACSHE062, ST2-10LW, ST2-11LW

### ACTIVITIES



#### BEFORE YOUR VISIT:

There are many animals with many different types of lifecycles. In some animals, young look like miniature versions of their parents, other animals are completely different to their parents at birth (for example, frogs).

Watch the video Life Cycle of a Frog <a href="https://www.youtube.com/watch?v=FIXoJYbBls0">https://www.youtube.com/watch?v=FIXoJYbBls0</a> (Teachers please note: This video mentions, and shows in a simplistic way, the fertilization of frog eggs. Please determine the suitability of this before showing your class)

Lots of different animals come from eggs, while we think of birds as coming from eggs, they are not the only egg laying animals (insects, reptiles, amphibians, even some mammals). Ask students if they can make a list of animals that come from eggs.

Watch video 'Egg-layers Great and Small' <a href="http://education.abc.net.au/home#!/media/1568242/">http://education.abc.net.au/home#!/media/1568242/</a> to see a variety of egg laying animals.

Have students choose their favourite animal from the video and research its lifecycle.



#### <u>DURING YOUR VISIT — SELF GUIDED:</u>

As you move around Currumbin Wildlife Sanctuary, looking at the animals, can you find:

- 1. An animal that lays an egg?
- 2. An animal that gives birth to live young?
- 3. An animal that looks like its parents when it is born?
- 4. An animal that looks very different to its parents when it is born?
- 5. Find two animals will very different life cycles and draw these life cycles.

Complete the lifecycles worksheet (attached) as you walk around.

#### <u>WILDLIFE DISCOVERY EXPERIENCE — LESSON — OPTIONAL</u>

Students are shown an egg and are asked to guess what animal it belongs to (spiny leaf stick insect).

Students find the spiny leaf stick insect in the room.

The education officer will lead the students in a discussion about the life cycle of the spiny leaf stick insect, while showing students (subject to animal health and availability) each life cycle stage as a live animal. Animal interaction is included.

Students are introduced to one of our frogs (<u>no animal interaction</u>) and using plastic models they recreate the life cycle. Students are asked to determine what environmental factors may influence the life cycle of frogs.

Students are then shown a picture of another egg (bird or echidna, animal subject to health and availability).

Students guess what animal this egg came from.

Students are led in a discussion about the life cycle of this particular animal. Animal interaction may be included.

Students are shown a picture of the final egg (reptile). They guess the animals and again are led in a discussion about the life cycle of this animal. Animal interaction is included.

#### AFTER YOUR VISIT:

Learn some more about stick insects and their relationships with ants as an example of a mutually beneficial relationship.

http://education.abc.net.au/home#!/media/1456052/ants-helping-stick-insects-

There are some follow up questions included with the video in the 'things to think about' tab.

Look at areas where frogs lay their eggs using this interactive Scootle resource

http://www.scootle.edu.au/ec/viewing/L201/index.html

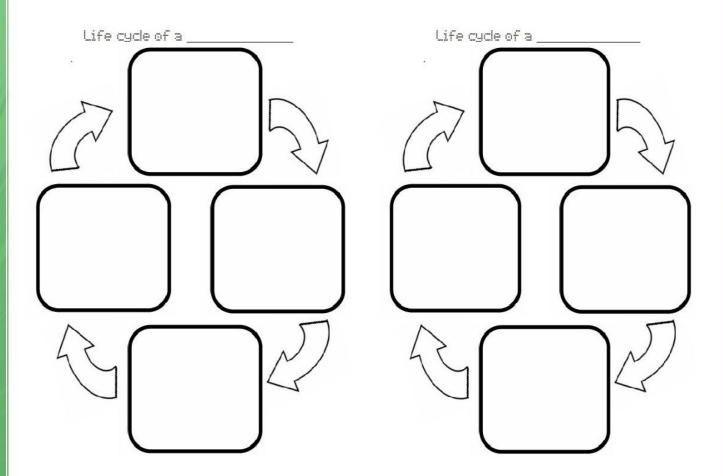






## EGGCELLENT EGGLAYERS WORKSHEET

Every animal has a lifecycle no matter if it is a amphibian, mammal, insect or reptile. However depending on its classification will depend on what stages of the life cycle will be present. Find two different animals and complete their lifecycles below. Do insects have more life cycles then mammals?





# DETAILED AUSTRALIAN CURRICULUM LINKS

Australian Curriculum links:		Elaborations:
Year 3 ACSSU044	Living things can be grouped on the basis of observable features and can be distinguished from non-living things.	Recognizing characteristics of living things such as growing, moving, sensitivity and reproducing.  Recognizing the range of different living things.  Sorting living and non-living things based on characteristics.  Exploring differences between living, once living and products of living things.
Year 4 ACSSU072 ACSHE062	Living things have life cycles.  Science knowledge helps people to understand the effect of their	Making and recording observations of living things as they develop through their life cycles  Describing the stages of the life cycles of different living things such as insects, birds, frogs and flowering plants.  Comparing life cycles of animals and plants  Exploring how science has contributed to a discussion about an issue such as loss of habitat for living things or how human activity has changed the local environment.
NSW Syllabus links:	Outcomes	Content
Stage 2 ST2-10LW	Describes that living things have life cycles, can be distinguished from non-living things and grouped, based on their observable features	Living things have life cycles, can be grouped on the basis of observable features and can be distinguished from non-living things. (ACSSU044)  Students:  Sort objects according to whether they are living or non-living.  Identify some features of living things that distinguish them from non-living things, eg reproducing, growing and responding to stimuli.  Identify and use patterns in the observable features of living things to group them, by using tables, diagrams or flowcharts.  Living things have life cycles. (ACSSU072)  Students:  Observe first-hand one animal or plant as it grows and develops, and sequence the stages in its life cycle  Identify ways that the environment can affect the life cycle of plants and animals  Living things, including plants and animals, depend on each other and the environment to survive. (ACSSU073)
ST2-11LW	that science knowledge helps people	Students:  Identify some factors in the local environment that are needed by plants and animal



understand the effect of their actions on the environment and on the survival of living things

for survival.

Gather information about some relationships between living things e.g. predator-prey, competitors and mutually beneficial relationships.

Describe some examples of how science knowledge helps people to understand the effect of their actions on the environment and the survival of living things. (ACSHE051, ACSHE062)