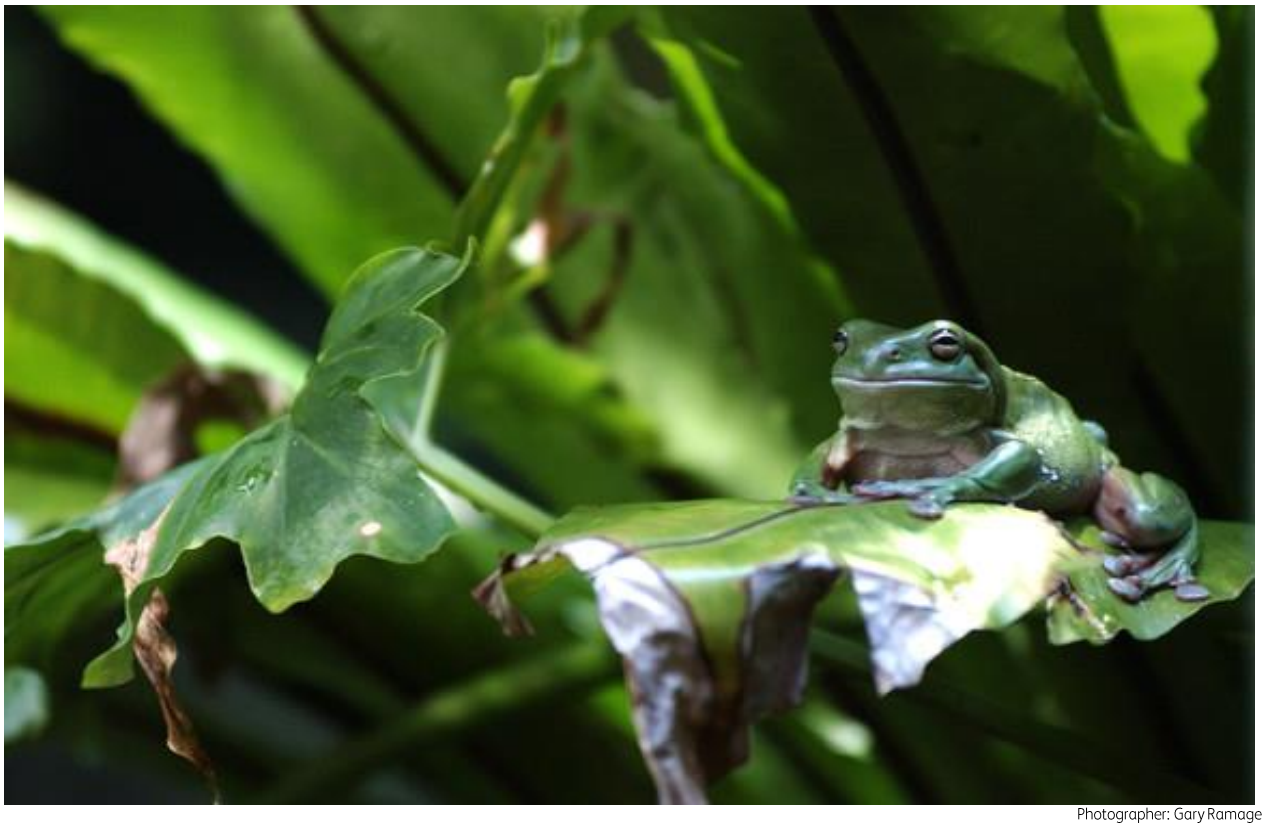
LIFE CYCLES

Stage 2: Science & Technology
ST2-1WS-S, ST2-2DP-T ST2-4LW-S



Photographer: Gary Ramage

Our local wildlife is doing it pretty tough these days. No matter which stage in their lifecycle; animals like birds, lizards, frogs and insects could really do with some help. Become a Backyard Buddy and learn how to design and build a habitat in your school or backyard.

OUTLINE

AT SCHOOL

Brainstorm living vs. non-living, and create your own definition! Draw up a KWL chart on two native living things that you have identified in your school. Make sure at least one is an animal and include the things that living things needs to survive. Include information about life cycles.

AT THE ZOO

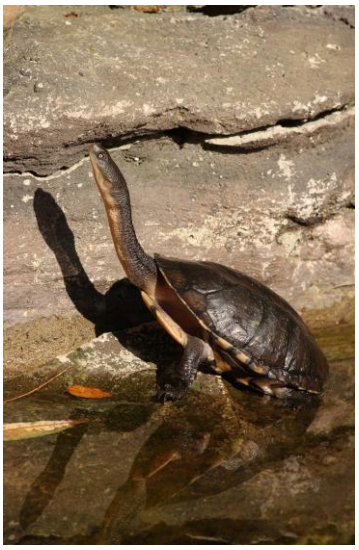
Visit the Australian Walkabout and learn about the life cycle of one of Australia's most iconic animals, the Kangaroo! Use your knowledge and imagination to complete the last pages of the book and finish the life cycle.

ZOO WORKSHOP

Explore our mystery box and meet some Australian animals up close to identify the different stages of animal life cycles. Students will also discover how they can create habitats to support life cycles of the animals that live around them.

BACK AT SCHOOL

Create a frog pond, lizard lounge or other habitat to suit your context back at school that meets the needs of all the stages of the life cycle of a frog/lizard/animal of your choice. Observe an animal that is attracted to your habitat to sequence the stages in its life cycle.



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AT SCHOOL - BEFORE THE ZOO

WHAT DO YOU KNOW ABOUT LIVING THINGS?

K.W.L

Choose two living things in your school grounds. Think about what each of these living things needs to survive and information about its life cycle, then record it.

- What I **K**now
- What I **W**ant to Know
- What I have **L**earned

K.W.L CHART

Name of living thing found in schoolyard: _____

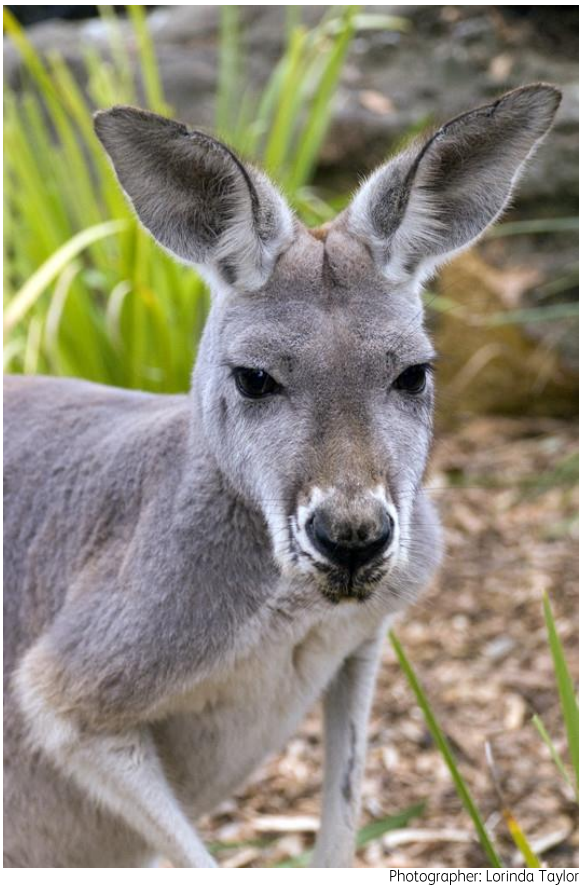
K What I Already Know	W What I want to know	L What I have Learned

ANIMAL OBSERVATIONS

Students go out into the playground and observe one animal. Take photos and record observations of this animal. Be prepared to share your findings with the Taronga teacher when you're at the Zoo!

METHODS TO OBSERVE ANIMALS

- Look closely under leaf litter, bark and on the grass to find invertebrates
- Use binoculars to find birds and possums
- Look closely for evidence of animals, e.g. scats, chewed leaves, foot prints, eggs.
- Look in or around logs for lizards



Photographer: Lorinda Taylor

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AT THE ZOO

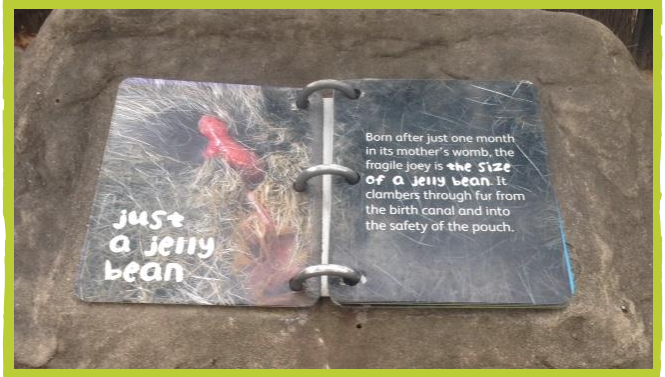
SELF GUIDED TOUR

Go on a mission around the Zoo to explore animal life cycles.

HINT: A great place to start is the Koala Walkabout, check out the back wall!

Book worms, we need your HELP!

Walk through the Australian Walkabout exhibit and take a look at the '***Just a Jellybean'*** *book.* This book is all about the Kangaroo lifecycle but there is a page missing!
Complete the Just a Jelly Bean book by writing the last page .
HINT: Remember to include a photo or sketch of the adult animal and some important facts and figures.
You could take a photo of the existing pages so you could complete your Just a Jellybean book back at school!



WORKSHOP

CONNECT

- Discover what's in the life cycle Mystery Box!
- Be ready to encounter some Australian animals and learn about their amazing life cycles.
- Role play a lifecycle that incorporates the effect peoples' actions could have on the environment an animal lives in.
- Learn how to create your own life cycle habitat!

DISCOVER

How to make an animal habitat which will support the whole life cycle of that animal.

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BACK AT SCHOOL- AFTER THE ZOO

The best way to observe living things is to see them in the natural environment! Here are some suggestions for how you can create habitat and care for animals and then observe their changes in their own homes!

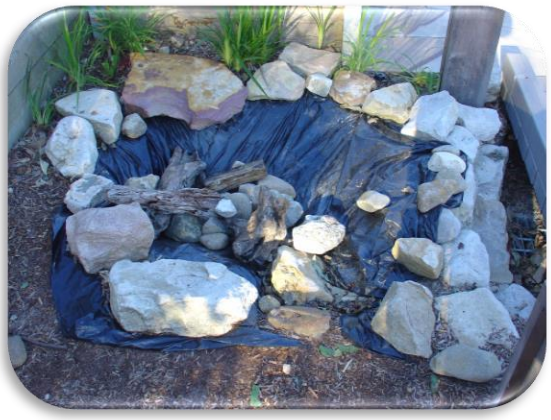
DESIGN AND MAKE YOUR OWN FROG POND!

Helpful Hints: Use the design process . Use the ***FrogID*** app to find out about the Frogs in your area. Investigate your school grounds thoroughly to find the perfect location.

MATERIALS

In order to build your Frog Pond, you will need:

- Plastic pond liner
- Gravel or washed sand
- Native plants and reeds
- Rocks, logs, leaf litter and bark
- Optional: Solar powered light (attract insects for food!)
- Optional: Native fish (control mosquito population)



BUILDING INSTRUCTIONS

Follow these easy steps to build your very own frog pond:

1. Find the right location in your backyard and dig a hole (depth 30 cm) and add a thin layer of sand.
2. Line with thick plastic pond liner.
3. Turn edges up and line with rocks.
4. Put rocks inside the pond to provide shelter for tadpoles.
5. Put native swamp plants in shallow end and lilies, etc. in deep end (cover the soil in the pots with sand).
6. Fill with tap water but let it stand for 1 week before any animals go in to remove chlorine.
7. Plant native shrubs/reeds around the pond to attract insects and provide shelter for frogs.
8. Place a solar light beside the pond to attract insects for the frogs.

CURRENT THREATS TO FROGS

There are a number of threats that contribute to the continued decline of our frogs including:

- Disease
- Habitat Degradation
- Stream Drying/ Wetland drainage
- Predation by introduced Exotic Predatory Fish
- Herbicide and Insecticide use

HABITATS

Frogs have adapted over time to survive in many different environments including rainforests, mountains and even deserts! Research the frog species that are found in your local area so you know the best type of habitat to create.

Pick a good location not too close to your house with access to some shade as well as other native plants and shrubs that they can use for shelter and to find food!

OR BE A CARETAKER FOR AN EXISTING HABITAT...

You could even look at the habitat of the animal you observed at the start and think of three ways that you can support it and its life cycle e.g. put signage up.

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