



NRM Education

Supporting environmental sustainability in schools.

A Frog's Life - Early Years Teacher Resource

Hands-on investigation of local frogs and their features.





A Frog's Life - Early Years

Introduction

A Frog's Life is a hands-on investigation of local frogs and their features encouraging students to become involved in monitoring the health of their waterways using frogs as an indicator.



Aims

This session aims to develop:

- Understanding of how frogs interact with water environments and are affected by ecosystem disturbance
- Basic understanding of why and how frogs are used to indicate the health of waterways
- Observation of the differences between the calls and features of the local frog species
- A sense of satisfaction from involvement in a hands-on activity contributing to the collection of environmental data

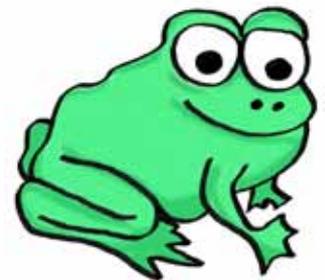


Activity Classroom session 50 minutes

Following an introduction to frogs as amphibians and why we are interested in studying them, we take a step-by-step look at the life cycle and habits of a frog using a series of stick-on pictures and a colourful poster showing a cross-section of a waterway.

Students then familiarise themselves with their local frog species by listening to different mating calls and, if possible, observing some live specimens.

We encourage students to become involved in surveying the frogs of their local waterway.





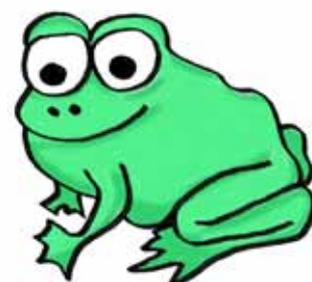
Links to the SACSA Framework

A Frog's Life session most closely aligns with the Learning Areas of Science and Society and Environment and primarily fosters the Essential Learnings of Interdependence, Thinking and Futures.

The Other Learning Opportunities listed also encourage links to additional Learning Areas and Essential Learnings as part of a holistic approach to learning about catchments and health of waterways. Students should also be encouraged to communicate their understanding through written pieces, artwork or other media.

Learning Area	Strand	Key Idea
Science	Earth and Space	Children collect, organise and share information online and offline about the aspects of their personal world that enable them and their family to live. Id · T · C · KC1 · KC2
Science	Life Systems	Children investigate the features and behaviours of plants and animals through direct and virtual experience. They explain, and share with others, their understandings of the connections between living things, and between themselves and natural environments. Id · T · KC1 · KC2
Science	Life Systems	Children reflect on the way people age in order to examine stages of growth and anticipate a range of preferred personal futures. They also explore the life cycles of other living things. F · Id · KC1 · KC6
Society and Environment	Time, Continuity and Change	Children begin to develop skills in analysing and representing the concept of time – present, past and future. F · T · C · KC1 · KC2
Society and Environment	Place, Space and Environment	Children develop an understanding of the concepts of sustainability, conservation and care of resources and places, and take action consistent with these. They assess the ways in which values affect behaviour. F · In · T · KC1 · KC6

South Australian Curriculum, Standards and Accountability Framework (SACSA) 2001, Adelaide: Department of Education, Training and Employment.





Key Competencies

Participation in A Frog's Life and the Other Learning Opportunities will encourage the learner to develop the following skills in relation to SACSA's Key Competencies:

- Collect, analyse and organise information through research of frog species and/or features (KC1)
- Communicate ideas and findings on frogs using a range of means of expression (KC2)
- Use technology to research features of frogs (KC7)

Other Learning Opportunities

These learning opportunities encourage the learner to actively use knowledge gained in A Frog's Life to further their understanding of frogs and catchment health.

- Investigate what it is that frogs need to survive. Does your local environment have those things? A photo of the local waterway may help you to identify whether it has these requirements or not.
- Investigate how frogs move. What features of their body enable them to move in this way? How would these features help them survive in their environment?
- Draw a simple food chain of 3 to 5 steps with a large animal such as a bird or fox at the top. Identify a frog's prey as well as its predators.
- Examine the life cycle of a frog. You may like to keep live tadpoles in the classroom to help with these observations. Discuss the things that might be harmful to the frog at each stage and ask the students to draw a picture showing one way they can help frogs in the wild to become healthy adults.
- Try out your best croaky voice and play the frog "Mating Game" to help you learn about aspects of the frog mating process.
- Create an amphibian atmosphere in the classroom. Put coloured cellophane on the windows, display drawings of your local frogs on the walls, collect a variety of books on frogs for display, place lily pads on the floor and dress up as a frog!
- Why do some frogs have webbed feet? Ask the students to push their hand through a tub of water with their fingers spread. Repeat the exercise with a plastic bag over their hand. Ask them to describe how each situation felt and why webbed feet would assist a swimming frog. Do all frogs have webbed feet? If not, why not? Name other animals with webbed feet.





Take Action!

- Design a frog friendly pond for your school to provide a suitable habitat for a local frog species, reporting on why you have included each feature.
- National Frog Week is the first week of November - join the celebration! This is a great opportunity to raise awareness about frogs and highlight their important role in our environment. Have the students share their knowledge with the school community. Design a froggy art display for the office foyer or the library.

Resources

These resources will help your investigations into frogs and their reliance on healthy waterways.

Books

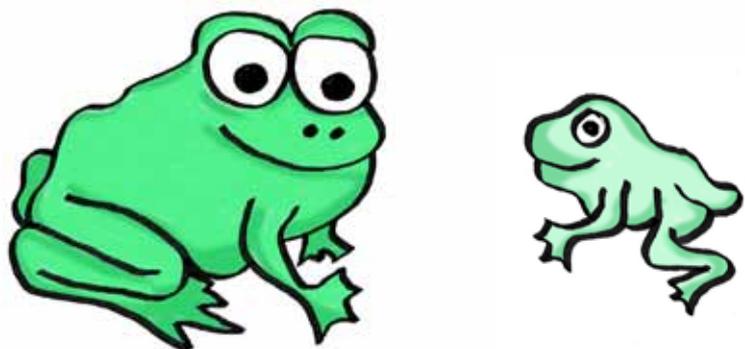
- Parish S (1998) Nature Kids: Frogs, Steve Parish Publishing
- Robinson M, Fleming G and Kirshner D (2000) Investigate: Frogs and Toads, Random House Australia

Posters

- Frogs of the Murray Darling Basin, Murray Darling Basin Commission
Ph:(02) 6279 0100

CDs

- ASX Frog Focus CD (2001) Ph: Taronga Zoo Education (02) 9978 4553 or go to www.asxfrogfocus.com
- South Australian Frog Mating Calls (2001), Contact your local NRM Education Coordinator.



Cover images: Banjo Frog; Cindy Kakoschke,
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