

Lifecycles - From spawn to frog

Focus:

- Life cycles

This lesson looks at the amazing life cycle of the common frog.

Country:

- England

Key stage:

- Key stage 1

Subject/Area of learning:

- Science - **Animals, including humans**
Living things and their habitats
- **PSHE - Living in the wider world**

Curriculum objectives

Pupils should learn:

- **To identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants and how they depend on each other**
- **To notice that animals, including humans, have offspring which grow into adults**
- **To find out about and describe the basic needs of animals, including humans, for survival**
- **What improves and harms their local, natural and built environments and develop strategies and skills needed to care for these**

Animal welfare objectives

Pupils should learn:

- that humans could have an effect on the success of life cycles.

Starter activity

Looking at frogspawn

- Prepare a small batch of 'frogspawn' by cutting a section of about 20 to 30 bubbles from the sheet of bubble wrap. Mark each bubble with a black dot using a permanent marker pen.
- Show the pupils this small section of bubble wrap. Can they guess the number of bubbles in that section? Explain that the bubble wrap is meant to be a batch of frogspawn.

- Show the images of the adult frog and frog spawn. How many eggs do they think one frog would lay in a pond?
- Hold up the full sheet of bubble wrap as an example of how many eggs one frog could lay in a pond. An adult frog can lay up to 4,000 eggs in one batch!

Learning styles: visual.

Main activity

What happens to frogspawn?

- Pupils work in groups and cut out the statements and images from the activity sheet *From spawn to frog*.
- Pupils pair up the statements and images and put them into order.
- Pupils then help to make the frog life cycle on the floor, together as a class. Use the teachers' notes *From spawn to frog* for more information.

Frog trail game

- Play the 'Frog trail game' using the materials listed in the *What you need section* (see *Useful Information* tab). This game provides an opportunity for pupils to learn more about the threats to the life cycle of the frog. This could be played as a whole class with two teams or in small groups.
- N.B. The game can be adapted for outside use (see activity sheets *Game instructions (outdoor version)* and *Game steps*).

Learning styles: visual, auditory, kinaesthetic.

Plenary activity

The lucky few

- Look at the bubble wrap frogspawn again. Out of the thousands of eggs laid, only a few actually make it to adulthood. Ask pupils which of the threats could have been avoided, e.g. humans dropping litter, people collecting the spawn.

Learning style: visual, auditory.

Differentiation

G&T

- Pupils carry out personal research into the life cycle of a ladybird. Use this information to create captions to go with the images on the activity sheet *From egg to ladybird*. Use the teachers' notes *Instructions for making a never-ending book* to create a book that records the life cycle of a ladybird. Consider some of the threats that ladybirds might face. See the teachers' notes *From egg to ladybird* for more information.
- Adapt the never-ending book idea for the life cycle of a frog using the activity sheet *From spawn to frog*. This will be more challenging as there are eight pages and only five images.

SEN

- Use toys and props to create a mock-up pond. This can easily be done with a piece of blue material, toys such as a duck, frog, lily pads, dragon flies and a set of plastic toys that represent the stages of the frog life cycle. The life cycle could be presented as a story with the children acting out various events.
- Can the children sequence events in the life cycle using the toys?

Extension activities

If possible, visit a pond to observe frogs in their natural habitat.

Display

Create a large display of the life cycle of a frog.

What you need

Equipment

- Interest table materials: stories, videos, posters, pictures, works of art, soft toys or models of the stages of a frog life cycle
- Large sheet of bubble wrap and black permanent marker

Activity sheets (see *Downloads* tab)

- *From spawn to frog*
- *From egg to ladybird*
- *Game instructions*
- *Game board*
- *Game instructions (outdoor version)*
- *Game steps*

Teachers' notes (see *Downloads* tab)

- *From spawn to frog*
- *From egg to ladybird*
- *Instructions for making a never-ending book*

Did you know?

- Common frogs and toads are found throughout Britain but the Natterjack toad is now rare and fully protected by law.
- Only five out of every 2,000 frogspawn eggs survive into adulthood.
- Fish, birds, newts, water shrews, water beetles and insects all eat tadpoles - even tadpoles eat each other!
- Frogs and toads are gardeners' friends because they eat a large number of beetles, bugs, woodlice, slugs, snails, and even ants.
- The seven-spot ladybird is also known as the gardener's friend as it can eat more than 5,000 aphids in its year-long life.
- In her lifetime, a female seven-spot ladybird may lay more than 2,000 eggs.

Vocabulary

algae

eggs

external

food

frog

frogspawn

gills

habitat
insects
legs
nutrients
pond
predator
tadpole
tail
temperature
underwater

Downloads

From egg to
From egg to ladybird
From spawn to frog
From spawn to frog
Game board
Game instructions (outdoor version)
Game instructions
Games steps
Instructions for making a never-ending book

Useful websites

[Froglife](#)