

## living-things

## An animal's life cycle

## Lesson at a glance

Open with one hook card — a Small Tortoiseshell egg on a nettle or frogspawn — and one wonder question about how something so small can look completely different. Name life cycle and stage, then groups order the butterfly cards first and the frog cards second on a start-to-finish strip. Build the butterfly cycle live on the explore interactive and check the frog cycle in display mode. Pupils draw and label one animal's four stages in the Investigation Journal, then compare same and different in a talk.

## Learning objectives

- Order the stages of an animal life cycle and say what changes at each stage
- Compare life cycles of two Irish animals (butterfly and frog)

## Before the bell – prep

Print and cut one butterfly set and one frog set per group the day before; keep sets in separate piles. Lay a paper strip or clear table line per group. Have the hook picture card ready. Stage words stay on the board for the drawing slot.

## Materials

| Item                                                                      | Qty | Per   | Source             | Low-cost substitute                                                                    |
|---------------------------------------------------------------------------|-----|-------|--------------------|----------------------------------------------------------------------------------------|
| hook picture card (butterfly egg or frogspawn photo)                      | 1   | class | provided printable | a clear textbook or library photo of butterfly eggs or frogspawn held up for the class |
| butterfly life-cycle cards (egg, caterpillar, chrysalis, adult butterfly) | 1   | group | provided printable | hand-drawn simple stage pictures on sticky notes                                       |
| frog life-cycle cards (frogspawn, tadpole, froglet, adult frog)           | 1   | group | provided printable | hand-drawn simple stage pictures on sticky notes                                       |
| sequencing strip or clear table space for ordering cards                  | 1   | group | classroom          | a strip of scrap paper or the desk edge as a start line                                |
| Investigation Journal page                                                | 1   | pupil | provided printable | plain paper for a labelled life-cycle drawing                                          |

**Safety watch-point**

Teacher cuts card sets before the lesson. No live animals or pond dipping in class; outdoor noticing is optional look-only with an adult.

**Teaching moves**

- **Getting Started:** Hold up only the egg or frogspawn hook card. Ask one wonder question and capture two or three ideas. Do not lay out stage cards or name the full cycle yet. Link lightly to gardens, ditches and school ponds in spring and summer.
- **What is a life cycle?:** Say the two key words aloud with the board table: life cycle and stage. Model thinking the butterfly story once without projecting a script. Head off 'sleeping chrysalis' and 'unrelated animals' gently — same animal, changing shape. Keep language grow, change, become.
- **Order the life-cycle cards:** One-minute picture walk: hold each stage with its name (say chrysalis as KRIS-uh-liss). All groups start with butterfly only; open frog when the butterfly line is stable. If two cards are reversed, ask them to tell the story from the start rather than giving the order.
- **Build the butterfly cycle:** Open the interactive in explore mode with no finished cycle showing. Build egg → caterpillar → chrysalis → adult butterfly from class votes. Pause on the loop arrow: the adult lays eggs so a new generation begins. Ask which stage crawls, which has wings, and where the biggest change happens.
- **Check the frog cycle:** Open the frog interactive in display mode already ordered. Retell frogspawn → tadpole → froglet → adult frog and stress the loop. Butterfly-only support groups check chorally with you — do not ask whether their line matches. Leave both finished cycles visible for the compare talk.
- **Draw a life cycle:** Model a short change sentence on the board first (e.g. The tadpole grows back legs). Every pupil draws four stages in order with labels — that is the must-do, in class not homework. Leave stage words visible. Early finishers write a different change sentence or add the loop idea.
- **Same, different, and in the garden:** Think-pair-share with both cycles still visible. Must-do: How are they the same? then How are the stages different? Outdoor noticing is nice-to-have only if time remains. Revoice pupil talk into stage, life cycle and change without shutting down curiosity.

**What it should show**

Butterfly order: egg → caterpillar → chrysalis → adult butterfly. Frog order: frogspawn → tadpole → froglet → adult frog. Journal pages show four labelled stages in that order. Same talk should land on eggs, stages, big changes and an adult that restarts the cycle; different talk on stage names, water vs plants, and chrysalis vs froglet. A mixed-up line usually means two neighbouring cards were swapped — have them retell from the egg.

## Misconceptions & interventions

- **The chrysalis is just sleeping, or the caterpillar and the butterfly are two different animals.** — Point to the cards in order and say the same animal is changing shape. Ask: which card comes just before wings appear? Optional stretch word only after they notice the big change: metamorphosis.
- **The life cycle stops at the adult — the story is finished.** — Pause on the loop arrow on the board interactive. Ask why the last arrow goes back to the egg or frogspawn, and have one pupil say the adult can start a new generation.
- **Frog and butterfly stages can be mixed because both start with an egg and end with an adult.** — Keep the two card piles separate. Hold frogspawn beside the butterfly egg and ask where each lives, then match each group's strip to the correct board cycle.

## Differentiation

| Emerging                                                                                                                                                                                                                                                                    | Developing                                                                                                                                                                                                                                          | Proficient                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Stay with the butterfly set only; supply stage words on the board so labels can be clear even if drawings are rough.</li> <li>• Fold butterfly-only groups into the frog check as whole-class namers pointing with you.</li> </ul> | <ul style="list-style-type: none"> <li>• After both lines are stable, ask which stage shows the biggest change of body shape and why.</li> <li>• Add one short change sentence naming what is different between two neighbouring stages.</li> </ul> | <ul style="list-style-type: none"> <li>• Compare both cycles: name one clear same and one clear different without teacher prompts.</li> <li>• Suggest where each cycle might be noticed outdoors (nettles, buddleia, ditch or school pond) and which stage they would expect to see.</li> </ul> |

## Cross-curricular hook

Link to SESE Geography local natural environment — frogspawn in spring ditches and Small Tortoiseshell caterpillars on nettles.