

living-things

Life cycles and the Irish year

Lesson at a glance

Open with a photo of Irish frog spawn and a hands-up guess at what comes next. Model the frog stages as a loop on cards, then groups sequence one animal set (frog or butterfly) and the oak set, closing each loop to the next generation. Drive the cycle interactive to contrast “grows into” with the return arrow, match key stages to Irish seasons, and finish with a labelled loop drawing plus one season note in the Investigation Journal.

Learning objectives

- Sequence the life-cycle stages of an Irish animal and a plant
- Link life-cycle stages to seasons in the Irish year
- Explain why a life cycle is drawn as a loop rather than a straight line

Before the bell – prep

Print and cut card sets the day before: frog packs for half the groups, butterfly for the other half, and one oak set per group. Bag or clip each pack. Keep a spare frog demo set. A clear frog-spawn photo on the IWB is enough; scrap paper arrows optional.

Materials

Item	Qty	Per	Source	Low-cost substitute
life-cycle stage cards, animal set (frog set for half the groups: frog spawn, tadpole, froglet, adult frog)	1	group	classroom	write the four stage names on sticky notes or scrap card
life-cycle stage cards, animal set (butterfly set for the other half of the groups: egg, caterpillar, chrysalis, adult butterfly)	1	group	classroom	write the four stage names on sticky notes or scrap card
life-cycle stage cards, oak set (acorn, seedling, sapling, mature oak)	1	group	classroom	write the four stage names on sticky notes or scrap card
Investigation Journal page	1	pupil	classroom	plain paper for a labelled loop drawing
photo of frog spawn for the hook (IWB or printed)	1	class	classroom	a simple teacher sketch of spawn on the board
spare paper arrows or scrap paper for closing each card loop	2	group	classroom	pupils rearrange cards in a circle and point with a finger

Safety watch-point

If you bring real frog spawn, keep it in a sealed clear container, no handling, and wash hands after; a photo on the IWB avoids the hazard entirely.

Teaching moves

- **What is a life cycle?:** Think aloud with four frog cards face down, then lay spawn → tadpole → froglet → adult and bend them into a loop pointing back to spawn. Hang the words life cycle and stage on what pupils just saw. Keep season link to one line. Gather the demo set before handing packs: animal open, oak face down.
- **Sequence the stage cards:** Minutes 0–5 animal loops only; freeze and open oak at minute 5. Circulate asking what clue on the card helped and where the next generation begins. At 12–15 minutes take three short shares: one frog order, one butterfly order, one oak order, each with one clue.
- **See the finished cycle:** Run the interactive in display mode. Point stage by stage, then pause on the return arrow labelled “lays spawn”. Contrast grows into (same animal changing) with lays spawn (next generation). Ask what begins again when the adult lays spawn.
- **Build a cycle on the board:** Switch to explore mode, cycle layout. Place egg → caterpillar → chrysalis → adult briskly from pupil calls, then spend the minutes on the closing arrow labelled “lays eggs”, not another grows into. Name aloud that even butterfly tables’ new job is why that last arrow is different.
- **Match stages to the Irish year:** Think-pair-share, then capture strong matches on a four-box season board. Draw out spawn in spring, caterpillars with leafy months, acorns in autumn, oak in full leaf in summer. Add one timescale line: a frog cycle can fit one Irish year; an oak may wait many years for acorns.
- **Record your life cycle:** Board the minimum bar from minute one: named living thing, at least three labelled stages in a loop with a return arrow, one season note. At about minute 3 freeze anyone still on a straight line and convert to a loop. Display correct stage words for copying names only; placement stays theirs.
- **Make sense and pack away:** Pack first—cards bagged, arrows collected, journals stacked—before any oral share. Take three quick voices aimed at order, season link, and why it is a loop not a finish line. Revoice with stage, life cycle, loop, season.

What it should show

Correct loops: frog spawn → tadpole → froglet → adult → new spawn; butterfly egg → caterpillar → chrysalis → adult → new eggs; oak acorn → seedling → sapling → mature oak → new acorns. Pupils should say the return is reproduction, not more growth. Sound season links include spawn in spring and acorns in autumn. A straight-line drawing or adult-as-end usually means the loop idea has not landed—send them back to the return arrow.



Misconceptions & interventions

- **Pupils treat the adult as the finish line:** “Then it’s just a frog forever.” — Point at the return arrow on the board cycle and ask what the adult does that starts the pattern again. Have them physically close their card loop back to spawn or eggs.
- **Pupils think frog or butterfly stages are the same animal simply getting bigger, so they skip or reorder look-unlike stages.** — Hold spawn beside adult frog, or caterpillar beside butterfly, and ask which cards look most unlike the adult. Name that some stages look and live very differently.
- **Pupils put adult butterfly before chrysalis because they know butterflies best as winged adults.** — Ask what has to happen inside the hard case before wings appear, then rebuild egg → caterpillar → chrysalis → adult with the class.

Differentiation

Emerging	Developing	Proficient
• Give two anchor cards (earliest and adult) and ask the group to place only the middle pair, then help close the loop. • Display the correct stage words on the board so pupils can copy labels while still placing them in loop order themselves.	• Prompt stuck groups with “What clue on the card helped you?” and “Where does the next generation begin?” • On the journal page, hold them to the minimum bar: three labelled stages, return arrow, one season note.	• Compare animal and oak: which stages look most unlike the adult, and how is oak different when a seedling already looks a little like a tiny tree? • Add a second season link or a one-line note on what that stage needs (water, leaves, light).

Cross-curricular hook

Link to Geography’s Irish seasons and local habitats—ponds, parks and school grounds as places to notice stages across the year.

