

Classifying Irish wildlife

Lesson at a glance

Open by holding up four Irish wildlife cards (robin, frog, oak, hedgehog) and asking how the class would sort them. Model a yes/no branching key by features, then groups build their own with eight photo cards and sticky notes, recording the finished key in the Investigation Journal. Drive the sorting-tree interactive on the IWB, then key out a mystery badger photo on a shared class path. Close with talk on which feature questions worked and why different keys can still be fair.

Learning objectives

- Build a yes/no branching key that sorts a set of Irish animals and plants by their features
- Use a branching key to identify a mystery specimen from its observable features

Before the bell – prep

Print and cut one set of eight wildlife photo cards per group the day before: robin, frog, oak, hedgehog, fox, salmon, ladybird, snail. Ready sticky notes, one Investigation Journal page per pupil, and a clear badger photo on the IWB with any name caption covered.

Materials

Item	Qty	Per	Source	Low-cost substitute
Irish wildlife photo cards (robin, frog, oak, hedgehog, fox, salmon, ladybird, snail)	1	group	provided printable	simple line drawings of the same eight living things on plain paper
sticky notes	12	group	classroom	small scrap paper squares and blu-tack
Investigation Journal page	1	pupil	provided printable	plain A4 page for a drawn or indented branching-key tree (questions and named endpoints)
mystery specimen photo on the board	1	class	classroom	a printed photo held up by the teacher

**Safety watch-point**

No outdoor fieldwork in this lesson. Card edges only. If you later take the class outside to try a key on real wildlife, wash hands after handling soil or plants and return any living things unharmed.

Teaching moves

- **What is a branching key?:** Model aloud with the same eight cards groups will use. Start with “Is it a plant?” then “Does it have feathers?” and keep splitting until each card has one named end point. Head off name-guessing: keys ask about features you can see, not “Is it a robin?” Name the Nature of STEM link — NPWS survey staff use keys like this in Irish hedgerows and woodlands.
- **Build our branching key:** Give each group one card set and sticky notes. Circulate asking: Does every card land in exactly one named place? What would make your first question clearer? If a group stalls, offer starter questions (plant? feathers? fins and scales? shell? spines? six legs?). Journal page needs a branched list or simple tree, not a flat grid.
- **Try the branching key on screen:** Drive the sorting-tree interactive, trying branches out together as a class. Keep branching until each card has its own named end point. Prefer “fins and scales” over “lives in water” so frogs don’t confuse the path. If the class disagrees on a Yes/No, pause — a good feature question must give a clear answer from what you can see.
- **Key out the mystery specimen:** Reveal the badger photo without naming it. Walk the shared class path one question at a time; pupils answer from visible features only. Groups record each decision and the final name in the Investigation Journal, then reveal badger and celebrate the path, not only the name. If time is short, record final name plus three features only.
- **Compare our keys:** After a short cross-group share, draw out that more than one first question can work if every feature is clear and every card ends named. Link the mystery: the badger needed a shared path because it was not on the build cards — that is how field keys grow when a new species appears.
- **What did the key tell us?:** After a pair share, hold the science talk: draw out one clear feature per question, and that name-guessing is unhelpful. If two groups disagree on a name, compare feature paths — the evidence is what you can see.

What it should show

A successful paper key names all eight cards at separate end points using clear yes/no feature questions. On the shared mystery path, the answers lead to badger: no to plant, feathers, fins/scales, spines, shell, six legs and smooth damp skin, and yes to thick fur and a black-and-white striped face. Odd results usually mean a name-guess question, a muddy double feature, or two cards sharing one end point — re-split that branch.



Misconceptions & interventions

- **Pupils want the first question to be “Is it a robin?” or another name.** — Hold up the cards and model: a branching key asks about a feature you can see, such as “Does it have feathers?” Names sit only at the end points once the group is split down to one.
- **Pupils pack two features into one question, e.g. “Does it have spines or a shell?”** — Ask them to answer Yes/No for the snail and the hedgehog — the muddled question cannot give a clean split. Rewrite as one feature only and re-sort.
- **Pupils think only one first question is “right,” so a different group’s key must be wrong.** — Compare two working keys aloud: plant-first and feathers-first can both name every card if features stay observable and each living thing has its own end point.

Differentiation

Emerging	Developing	Proficient
• Start with three cards only (oak, robin, frog), copy that mini-key into the journal, then add cards one at a time from the suggested starter questions.	• Complete the full eight-card key, then check a neighbour’s first question still leaves every card in one named place.	• Swap one card with another group and test whether their key still works; if not, rewrite the broken branch with a clearer feature question.

Cross-curricular hook

Link to Geography — Irish habitats and native wildlife in hedgerows, woodlands, rivers and school gardens.