

Classifying Irish wildlife

Lesson at a glance

Open by holding up four Irish animal cards (robin, frog, bat, hedgehog) and ask how the class would sort them so someone else could find each one again. Model a clean yes/no branching key on the board with vehicles (bicycle, bus, boat, aeroplane), deliberately false-starting so pupils see why every answer must be certain. Groups then build their own key, following the seven build steps on the board, with sticky notes on eight animal cards and record the branched path in the Investigation Journal. Drive the sorting-tree interactive on the IWB, key out a mystery badger on a shared class path, and close with science talk on what makes a feature question work.

Learning objectives

- Build a yes/no branching key that sorts a set of Irish animals 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 (robin, frog, bat, hedgehog, fox, salmon, ladybird, snail) plus sticky notes. One Investigation Journal page per pupil. Cue the sorting tree interactive on the IWB; the mystery badger photo is on the step 5 screen, with no name on it.

Materials

Item	Qty	Per	Source	Low-cost substitute
Irish wildlife photo cards (robin, frog, bat, 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

Supervise scissors if pupils cut the printed card sets; otherwise low hazard: paper cards and sticky notes only.

Teaching moves

- **What is a branching key?:** Spend about eight minutes on the board before any wildlife cards go out. Work the vehicle set only. Offer “does it have wheels that touch the ground?”, let someone spot that the aeroplane breaks it, then replace it with “does it travel on water?” so the class feels why every Yes/No must be certain.
- **Build our branching key:** Give each group one card set and sticky notes, and point to the seven build steps on the board. Insist questions name features, not animal names. Circulate asking “Does every card land in exactly one named place?” Resist suggesting a first question; if a group is stuck, ask what the biggest difference across their cards is. Watch for “Can it fly?”: it puts the robin, the bat and the ladybird together, so the next question has to split them by a feature they can see.
- **Try the branching key on screen:** Drive the sorting tree interactive on the IWB. Frame it as the same rule as the paper keys: keep branching until each card has its own named end point. When the class disagrees on a Yes/No, pause and treat it as science talk: a good question must give the same answer from what you can see.
- **Key out the mystery specimen:** Reveal the badger photo and give a few silent looking seconds. Lead the shared class path aloud, one feature question at a time. Groups list each decision and the final name on the Investigation Journal page; credit the path as much as the name.
- **Use the key on your own:** Put one living thing up at a time and hold Check until every pupil has decided alone first. Then have groups compare first questions with a neighbour group and be ready to share one difference that still named every card fairly.
- **What did the key tell us?:** Short pair share, then whole-class science talk. Draw out: one feature per question; two pupils looking at the same photo should give the same answer; biologists and NPWS staff use keys like this in Irish hedgerows, woodlands and school gardens.

What it should show

A successful group key gives every one of the eight cards its own named end point using clear feature questions (e.g. feathers / six legs / wings made of skin / fins and scales / spines / shell). The mystery specimen keys out as badger via fur then black-and-white striped face. Cards left sharing one end point usually mean a vague or double-barrelled question; re-ask for one visible feature only.



Misconceptions & interventions

- **“Does it live outside / in water?” is a good first question.** Point at the frog and salmon cards together: both use water, so the split is muddy. Ask them to replace it with one certain visible feature such as “Does it have fins and scales?”
- **Pupils guess the mystery name from memory instead of walking the features.** Slow the path, and have them justify each Yes/No from what they can see on the photo before anyone says “badger”.
- **If two groups started with different first questions, one key must be wrong.** Have both groups walk their paths aloud. Affirm that different fair starts still work if every feature is clear and every card ends named.

Differentiation

Emerging	Developing	Proficient
• Start with three cards only (robin, frog, bat), copy that mini-key into the journal, then add the remaining five. • Pair at the teacher table and supply one clear starter question such as “Does it have feathers?”	• After the eight-card key works, ask which first question split the set into the two most useful piles and why. • On the mystery path, record every feature decision, not only the final name.	• Run the key on three tricky animals said aloud (a seal, a slug, a swan), or swap one card with another group: either usually exposes a vague question. • Critique a neighbour key for any double-barrelled or uncertain Yes/No and suggest a cleaner feature rewrite.

Cross-curricular hook

Link to Maths sorting and tree diagrams: pupils draw the branched Yes/No path and read how each split halves the set.