

living-things

Classifying with our own criteria

Lesson at a glance

Open with seven Irish wildlife photo cards (badger, heron, earthworm, bee, fern, oak, frog) and ask what features could sort them. Name classify and criteria with a live plant/animal split, then model a clean branching key on the IWB sorting-tree using five minibeasts and leg questions. Groups choose criteria, write a multi-step yes/no key on one master A4 sheet, and swap as Hiders and Followers to identify a mystery specimen and rewrite one weak question. Close with board challenge checks ending on the frog.

Learning objectives

- Classify Irish plants and animals using self-chosen criteria and justify the groupings
- Build a multi-step branching key that another group can follow
- Use a key to identify a mystery specimen and refine questions that do not split the set cleanly

Before the bell: prep

Print one full set of the seven Irish wildlife photo cards per group; the five minibeasts for the model are on screen, in the sorting tree interactive. Stack blank A4 (one master key sheet per group) and spare pencils, and print an Investigation Journal page per pupil for the criteria, Question 1 and one path of the key.

Materials

Item	Qty	Per	Source	Low-cost substitute
Irish wildlife photo cards (badger, heron, earthworm, bee, fern, oak, frog)	1	group	provided printable	simple line drawings or magazine cut-outs of the same seven living things, labelled on the back
A4 plain or ruled paper (master branching-key sheet)	1	group	classroom	any spare ruled page or the back of scrap paper large enough for both paths
pencils	1	pupil	classroom	none needed

Safety watch-point

No significant hazard: card and paper work only. Keep photo-card sets complete at pack-away so the next class has all seven specimens.

**Teaching moves**

- **What does classify mean?:** Board only two words: classify, then criteria. Do the plant/animal split with the seven cards in view before naming criteria as 'the feature we just used'. Push vague offers like 'big' or 'nice' back toward features you can check by looking.
- **Model a branching key:** Drive the sorting-tree live: worm, ladybird, spider, snail, ant. Ask the class 'Does it have legs?' then 'Does it have eight legs?' and drag with their answers. After the first clean split, name the path a branching key. Stop at the three leg groups and say groups will push every path to a single name.
- **Choose criteria and first groups:** One set of seven cards per group. Criteria stay inside the four board families. If diet comes first, ask where oak and fern sit and steer to plant/animal first; badger and earthworm break the plant-eater/animal-eater binary: switch that pile to legs, habitat or movement.
- **Build our multi-step key:** One scribe, one master A4 copying the indented board layout. Pace: agree Q1 and split piles (2 min), write one full path to names (4 min), finish the other branch (5 min), quick read-through (1 min). Reject 'Is it big/nice/weird?'; test with 'If I have never seen your cards, can I still follow this?'
- **Mystery specimen swap:** Pair groups; put Hiders/Followers roles on the IWB and leave them up. Check each master has named ends on both sides of Q1 before the follow starts. Give not-yet pairs two minutes with a stem question. One improved question only after the check; treat a wrong path as useful data.
- **Board key check:** Switch sorting-tree to challenge mode: spider → 8 legs, worm → no legs, ladybird → 6 legs. Then key the frog with true yes/no only: 'Is it a plant?' (no) then 'Does it have legs?' (yes) → frog. Do not use either/or wording.

What it should show

A usable master A4 has clear yes/no questions on both paths of Q1 and five or more named ends (all seven is stretch). Followers should reach the hidden card's name without guessing; failures usually trace to vague questions ('Is it big?') or a diet fork that leaves oak, fern, badger or earthworm with nowhere to sit: rewrite to a look-checkable feature.

Misconceptions & interventions

- **'Is it big?' or 'Is it nice?' is a fair sorting question.** Ask 'Big compared with what?' and hold two cards side by side. Push for a feature you can check by looking: legs or no legs, plant or animal, water or land.
- **Diet can be the first split for the whole set, including oak and fern.** Ask 'Where do oak and fern go on that menu?' Steer to plant or animal first; use diet only inside a fitting animal branch (e.g. heron vs bee).
- **A branching key can stop at unnamed piles or use either/or wording.** Show the board layout needs named ends on both YES and NO paths. Rephrase 'plant or animal?' as the yes/no 'Is it a plant?'

Differentiation

Emerging	Developing	Proficient
• Offer only two starter criteria (plant or animal; legs or no legs) and accept labelled end groups briefly, then push to names before the swap. • Give a stem Q1 ('Is it a plant?' or 'Does it have legs?') so both paths get at least one named end.	• Re-sort the same seven with a different criterion and say which first split felt cleaner. • After one solid follow-and-rewrite, swap Hiders/Followers if time remains.	• Stretch the master key to all seven named ends with two or more steps on every path. • Critique a partner key: which question would a stranger find hard to answer by looking, and rewrite it.

Cross-curricular hook

Links to Maths logic and sorting: each yes/no fork is a binary decision pupils can read as a simple tree diagram.