Lesson 6

living-things

Sorting Irish animals by their features

Lesson at a glance

Open with the robin and salmon cards only and ask what looks the same and different. Introduce feature, sort and sorting rule, then groups look closely at all six Irish animal cards without sorting yet. Groups choose one visible-feature rule (legs, wings or covering), sort into spaces and jot the groups on a sticky note. The class then drives the sorting-tree interactive on the IWB by legs and wings. Groups re-sort by land/water or how it moves and record both sorts plus a usefulness line in the Investigation Journal before a talk on why clear grouping helps Irish wildlife work.

Learning objectives

- Group Irish animals by visible features such as legs, wings, feathers, scales, spines or shell
- Re-sort the same animals by a second sorting rule such as habitat or movement
- Explain why a chosen sorting rule is useful

Before the bell — prep

Print one set of six wildlife photo cards per group (robin, frog, hedgehog, snail, salmon, bee). Ready up to six sorting spaces per group (A3 sheets, trays or hoops), sticky notes or scrap, and the Investigation Journal page. Cue the sorting-tree interactive in explore mode with those six animals.

Materials

Item	Qty	Per	Source	Low-cost substitute
Irish wildlife photo cards (robin, frog, hedgehog, snail, salmon, bee)	1	group	provided printable	simple line drawings of the same six animals on scrap card with the name written underneath
labelled sorting spaces (A3 paper sheets, trays or hoops)	6	group	classroom	six sheets of scrap A3 or A4 paper, or chalk circles on desks
scrap paper or sticky notes for first-sort reminder	1	group	classroom	corner of the group's scrap paper or the reverse of a used sheet
Investigation Journal page	1	pupil	provided printable	plain paper with two simple grouping spaces drawn by the pupil

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Safety watch-point

Classroom only. No live animals and no outdoor collecting in this lesson. Normal care with laminated card edges.

Teaching moves

- **Getting Started:** Show only the robin and salmon cards; keep the rest face down. Take three or four quick same/different answers aloud. Do not name the full sorting rules yet — key question: what can we see that is the same, and what is different?
- **What helps us group animals?:** Project the short board text on feature, sort and sorting rule. Model one wonder–predict–check cycle with robin and salmon only (wings vs fins/scales). Say criterion once as the scientist word, then default to sorting rule. Head off fins-as-legs and 'fish has no covering'.
- **Look closely at the cards:** Hand out one six-card set per group. One minute quiet looking, then circulate with prompts: point to the covering; how many legs; wings or fins? Insist they notice only — no sorting yet. If a group races, ask for one feature every card has and one only some have.
- **Sort by a feature:** Offer the three board rules (legs/no legs; wings/no wings; covering) and let each group pick one. Visit asking: what is your sorting rule, and which animal nearly tricked you? After about nine minutes freeze and invite two groups with different rules to explain; ask watchers whether the salmon would stay put under their rule. Every group must leave a sticky note of rule and groups on the desk.
- **Branching sort on the board:** Open the sorting-tree interactive in explore mode. Take one animal at a time; pupils answer Does it have legs? then Does it have wings? while you drag. Do not reveal a finished sort first. After the tree, ask which question split best and link back: same animals, different rule, different groups.
- **A second sort and our journal:** Cards back; first sticky note stays on the desk. Groups choose land/water or how it moves and re-sort. For land/water keep frog with pond/river unless the group justifies land from the card. Then journal: both sorting rules and groups (sort one from the sticky) plus one short usefulness line. Early finishers whisper one animal that changed groups and why.
- **Why grouping matters:** No platform writing. Start from the cards (which animal moved; which rule was fairest), then one step to Irish wildlife work: clear repeatable rules help people count birds, check ponds and look after hedgerows and rivers. Tidy cards into sets.

What it should show

First-sort groups should match the chosen rule: e.g. no legs = snail and salmon; wings = robin and bee; covering splits all six by feathers, scales, shell, smooth skin, spines, hard body. Board tree: no legs = snail, salmon; legs no wings = frog, hedgehog; legs and wings = robin, bee. Second sort: land = robin, hedgehog, snail, bee and water = frog, salmon; or flies/hops/walks/swims/crawls as on the cards. Odd placements usually mix fins with wings or guess diet instead of looking.

Misconceptions & interventions

- **Pupils call the salmon's fins 'wings' or 'legs', or say a fish has 'no covering'.** — Point at the card: fins are for swimming, not legs or wings; covering is the outer surface — scales on the salmon, feathers on the robin, shell on the snail.
- **Pupils sort by what the animal eats or how it feels ('nice', 'scary') instead of a visible feature.** — Hold up two cards and ask what you can actually see — legs, wings, covering. Revoice: our sorting rule has to be something on the picture everyone can check.
- **Pupils think there is one correct way to group the six animals forever.** — Point to their sticky note and the second sort: same cards, new rule, new groups. That is the point — changing the sorting rule is allowed and useful.

Differentiation

Emerging	Developing	Proficient
• Steer the group to the legs / no legs rule only and sit with them to place each card while they name legs or no legs aloud. • Let them copy the first-sort list from the sticky note into the journal with a partner before attempting sort two.	• After the first sort, ask them to name one animal that nearly tricked the group and why. • On the second sort, prompt: which animal changed groups, and what about the new rule moved it?	• Allow a split within a group (e.g. legs-and-wings vs legs-no-wings) if they can name the finer rule. • In the board talk, ask whether a different first yes/no question could split the six just as clearly.

Cross-curricular hook

Link to Maths data and sets — pupils sort the same six items by two different rules and compare the groups.