

Adapted to survive

Lesson at a glance

Open with frog and grey seal photo cards side by side and ask what body features help each where it lives. Model matching the frog to an Irish bog, naming how webbed feet and moist skin do a job. Groups then sort eight living-thing cards onto bog, coast and hedgerow mats, reason two mystery creatures from features alone, and design one labelled best-suited creature for a dealt habitat. They record three feature–help–habitat rows on the ComparisonTable Investigation Journal page before a short share.

Learning objectives

- Match Irish living things to features that help them survive where they live
- Explain a mystery creature's likely habitat from its features
- Design a best-suited living thing for a named Irish habitat and justify each feature

Before the bell – prep

Print and cut one set of eight living-thing cards, feature reminder cards and three habitat mats per group the day before; bag each set. Have plain paper, pencils and colouring pencils ready. Optional safe feathers or tough leaves for gentle touch only.

Materials

Item	Qty	Per	Source	Low-cost substitute
living-thing photo cards (frog, heather, grey seal, bladderwrack, hedgehog, oak, oystercatcher, holly)	1	group	provided printable	simple line drawings of the same eight living things on paper rectangles
habitat mats (Irish bog, Irish coast, Irish hedgerow)	1	group	provided printable	three labelled A4 sheets with the habitat names and short condition notes
feature reminder cards	1	group	provided printable	one shared feature list on the board
mystery creature prompt cards	1	class	provided printable	teacher reads and projects the mystery feature lists from the lesson notes
envelopes or wallets for card sets	1	group	classroom	paper clips or rubber bands to keep each set together
plain paper for living-thing designs	1	group	classroom	the back of scrap paper
pencils and colouring pencils	1	pupil	classroom	crayons or markers
optional natural samples (clean feathers or tough leaves)	1	class	outdoors	skip real samples and use photo cards only
Investigation Journal page	1	pupil	provided printable	ruled paper with headings feature / how it helps / which habitat

Safety watch-point

If pupils touch optional feathers, leaves or other natural material, they wash hands before the journal and before going home. Supervise any optional scissors use.

Teaching moves

- **Getting Started:** Show the frog and grey seal cards on the IWB. Take a short hands-up compare, then steer past colour and size toward features that do a job — webbed feet, blubber, streamlined shape. Keep habitat mats face-down; do not hand out full card sets yet.
- **Features that help survival:** Teach adaptation, habitat and feature from the short board table. Hold up the frog card and think aloud the full worked match; pause after 'I predict' for a 20-second pair talk, take two answers, then finish linking each feature to wet bog conditions. Head off 'animals choose their features' gently — features are already part of the living thing.
- **Match features to habitats:** Groups of three or four get 10 minutes to place all eight cards, then 5 minutes of class shares. Circulate and insist on a how-it-helps sentence tied to wet, salty, cold or sheltered conditions, not just the habitat name. Accept flexible justifications; keep frog/heather on bog, seal/bladderwrack/oystercatcher on coast, hedgehog/oak/holly on hedgerow.
- **Mystery creature: where does it live?:** Read Mystery Creature A to the whole class, give groups two minutes, then take evidence with at least two features. Fold the class in: 'Do you agree? What would change your mind?' Use Creature B or the hedgerow stretch if time allows. Stress that one feature alone is rarely enough.
- **Build a best-suited creature:** Deal one habitat mat per group so the room has a mix. Say the success criteria aloud: three labelled features, each linked to a real habitat condition, no magical powers. Give about 12 minutes for one shared drawing. Watch for decoration with no survival job and ask how the feature helps on that shore, bog or hedge.
- **Record in the Investigation Journal:** Project a blank ComparisonTable and model one frog row: webbed feet · push through water in pools · Irish bog. Pupils add three rows from the card sort or their design. Push for a real job in the how-it-helps cell, not 'it needs it'. Support spellings of bog, coast and hedgerow.
- **Make sense and tidy:** Protect two spoken shares before tidy swallows the takeaway — pull the thread that features tell a survival story, as naturalists do at places like Clara Bog or a local strand. Then pack cards into envelopes and send anyone who touched natural material to wash hands.

What it should show

Card sort: frog and heather → bog; grey seal, bladderwrack and oystercatcher → coast; hedgehog, oak and holly → hedgerow. Mystery A is coast (clamping shell, salt spray, seals water for low tide); Mystery B is bog/wet edge (long legs on soft ground, probing beak, reed camouflage). A successful design has three labelled features each tied to a real condition of the dealt habitat.

Misconceptions & interventions

- **Pupils say animals 'choose' or 'want' features so they can live somewhere new.** — Hold up a living-thing card and revoice gently: the features are already part of it; we match the jobs they do to the place it lives. Keep the talk on matching, not evolution.
- **Pupils pick a habitat from one feature alone, e.g. 'it has legs so it lives in a hedgerow'.** — On the mystery beat, ask which two features together convinced them. Model weighing clamping shell plus salt spray before naming coast.
- **In the design, pupils add decoration or magical powers with no survival job.** — Point at the extra detail and ask: 'How does that help on a windy salt shore / in soft wet bog / under a thick hedge?' Cross out or relabel anything that cannot earn its place.

Differentiation

Emerging	Developing	Proficient
• Offer the board stem 'This feature helps because...' and sit with the teacher table to place two cards using the feature reminder set. • Accept two clear labelled features on the group design and scribe the how-it-helps phrases if writing stalls.	• Push every match and journal row to name a habitat condition (wet, salty, cold, sheltered), not only the habitat title. • After three design features, ask one trade-off: what does this feature help, and what might it make harder?	• Justify splitting a living thing across two habitats only with strong evidence, or lead reasons for Mystery B / the hedgerow stretch. • Add a plant version of their design, or say which of today's features would stop helping if a bog dried out.

Cross-curricular hook

Link to Geography local habitats — school hedgerow, nearby strand or bog — and oral English justifying with 'because' evidence.