

Adapted to survive

Lesson at a glance

Open with the frog and grey seal photo cards side by side and ask what body features might help each where it lives. Model the frog-to-bog match aloud (adaptation, habitat, feature), then groups sort eight Irish living-thing cards onto bog, coast and hedgerow mats, naming how each feature helps. A mystery-creature feature list on the IWB forces evidence-based habitat talk before groups design a best-suited living thing for one assigned habitat. Recording lands on the Investigation Journal sort table, labelled drawing and one feature-helps sentence.

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 living-thing set, feature reminders and three habitat mats per group; bag each set in an envelope for reuse. Have frog and seal photo cards ready for the hook. Optional: safe feathers or tough leaves for gentle touch, then handwashing.

Materials

Item	Qty	Per	Source	Low-cost substitute
living-thing photo cards (common frog, heather, grey seal, bladderwrack seaweed, hedgehog, oak tree, oystercatcher, holly)	1	group	provided printable	simple line drawings of the same eight living things on paper rectangles
habitat mats (Irish bog mat, Irish coast mat, Irish hedgerow mat)	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 materials, they wash hands before the next step and after pack-away. Supervise gentle handling only.

Teaching moves

- **Getting Started:** Show the frog and grey seal cards together on the IWB. Keep it to one short compare and hands up. If pupils name only colour or size, steer toward features that do a job: webbed feet, blubber, streamlined shape.
- **Features that help survival:** Teach from the on-screen concept table. Hold the frog card and think the match aloud: I wonder → pause for a 20-second pair talk on which feature matters most → take two answers → finish I check / I match / I think. Head off ‘animals choose features’ gently: features are already part of the living thing.
- **Match features to habitats:** Groups of three or four get 10 minutes to sort eight cards onto bog, coast and hedgerow mats. Circulate and demand the how-it-helps sentence, not just the habitat name; point stalled groups to the feature reminder cards. Keep whole-class shares clear: frog and heather on bog; seal, bladderwrack, oystercatcher on coast; hedgehog, oak, holly on hedgerow.
- **Mystery creature: where does it live?:** Project Mystery Creature A’s feature list and leave it visible. Groups get two minutes, then must point at two features before naming a habitat. Fold the class in: ‘Do you agree? What evidence would change your mind?’ Swap to Creature B if time allows.
- **Build a best-suited living thing:** Deal one habitat mat per group so the room has a mix. Leave success criteria on the board: three labelled features, each linked to a real habitat condition, no magical powers. Give a 30-second coast model, then 12 minutes for one shared labelled drawing. Challenge decoration with no survival job: ‘How does that help on a windy salt shore?’
- **Record in the Investigation Journal:** Project a blank journal page and model the frog pattern: bog column, label webbed feet, sentence ‘webbed feet push through water in bog pools’. Every pupil sorts all eight, labels three features on the drawing, and writes one full feature-helps-habitat sentence. Support spellings of bog, coast, hedgerow.
- **Make sense and tidy:** Do sense-making first (two or three quick shares from different habitats), then pack cards. Spoken only: which feature surprised you, or which would stop helping if a bog dried out. Cards into envelopes; anyone who touched natural materials washes hands.

What it should show

Expect frog and heather on bog; grey seal, bladderwrack and oystercatcher on coast; hedgehog, oak and holly on hedgerow. Mystery A is coast (clamp shell, salt spray, seals water); Mystery B is bog (soft wet ground, probing beak, reeds). Successful designs show three features each tied to a real condition of the assigned habitat. Odd card placements usually mean pupils matched by looks alone: send them back to name the job the feature does.

Misconceptions & interventions

- **Pupils say animals ‘choose’ or ‘want’ features so they can live somewhere.** Hold the frog card and restate gently: the features are already part of the living thing; we match the job each one does to the place it lives, not a wish to change.
- **One feature alone is enough to decide the habitat.** On the mystery list, cover all but one feature and ask if they are still sure. Uncover two or three and model weighing them together before naming bog, coast or hedgerow.
- **Pupils decorate their design with features that have no survival job, or copy features from the wrong habitat.** Point at the spare feature and ask: ‘How does that help on soft wet bog / a windy salt shore / under a thick hedge?’ If they cannot link it to a real condition, they change or drop it.

Differentiation

Emerging	Developing	Proficient
• Offer the board sentence stem ‘This feature helps because...’ and sit them briefly at the teacher table with the feature reminder cards in hand. • Accept three clear card-to-habitat matches with one named feature each before expecting the full eight.	• Push every match to name the habitat condition (wet, salty, cold, sheltered) the feature answers. • On the design sheet, require the three labels plus one full how-it-helps sentence before they colour.	• Let them justify splitting a card across two habitats (e.g. holly hedgerow and woodland edge) by naming which feature works in both and which in only one. • Early finishers add one trade-off on the design (e.g. thick blubber helps in cold water but slows movement on land) or take the stretch hedgerow mystery.

Cross-curricular hook

Link to Geography local habitats (school hedgerow, nearest strand or a boardwalk bog such as Clara Bog) and the features naturalists match on a survey walk.